

RURAL MONEY MARKETS IN INDIA

by

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A thesis submitted for the degree of
Doctor of Philosophy,
University of London, 1972.



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ABSTRACT

In this thesis I seek to analyse some major characteristics of the Indian rural money market between the early 1950's and late 1960's.

The Indian rural money market is distinguished by its duality, with the unorganized sector largely dominating the supply of funds even to-day. On the demand side, the pattern of debt and borrowing has remained roughly the same during the period studied. Capital expenditure rather than family expenditure seemed to be the more significant variable affecting credit demand. This is reflected in the correlation found between higher levels of debt/borrowing and larger capital expenditure. The most important form of security against which loans were either borrowed or outstanding was personal. Seasonality was observed in debt and borrowing. The modal range of rural interest rates in India was found to be between 18 and 25 per cent. (which is considerably less than many commentators have implied). Rural interest rates are largely explained by risk and uncertainty rather than by the monopoly power of money-lenders, though monopoly profit may have existed in some cases. Statistical tests showed positive correlation between income of farmers and repayments and negative correlation between the interest rate, on the one hand, and income, repayments and monetization on the other. A rise in farm incomes, thus, may reduce the risk-premium and, therefore, rural rates. In the organized sector, the primary credit co-operative societies mostly fail to satisfy the various criteria of financial viability, though in some states their progress was not unsatisfactory.

The major defects in their working were poor quality of loan administration leading to rising overdues, bad management and failure to mobilise rural savings and link credit to marketing. The total size of the two sectors of the rural money market and the links between them were difficult to measure in the absence of reliable data. Rough estimates tentatively suggested a slow fall in the size of the unorganized market and tenuous but perhaps slowly growing links between the sectors. For example, bazaar rates were found to be influenced by lagged Bank Rate. The existing policies for developing these links are criticised and some methods are suggested for further integration. These include the development of co-operative paper, improving the quality of hundis, and the development of a multi-agency approach which would foster productive use of loans. Successful prosecution of these policies would lend to a rise in farm incomes. It may be suggested that this will reduce the rural interest rate.

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Acknowledgements

I wish to acknowledge my deep gratitude to my supervisors, Mr. T.J.Byres and Mr. P.I.Ayer for their guidance, continuous encouragement and valuable comments in the preparation of my thesis. I gained a great deal from my discussion with Dr. Ramgopal Agarwala. I am thankful to Dr. Biplab DasGupta for his encouragement. I am most grateful to the Scholarship Committee of the School of Oriental and African Studies for granting me a Governing Body Post - Graduate Exhibition, to the Trustees of Edwina Mountbatten Awards and to the Trustees of Sir Richard Stapley Education Trust for providing me financial support. I am very thankful to the staff of the libraries of the India House and the London School of Economics for their help and excellent co-operation. Finally, I would like to thank Mrs.Irene Clent, Mrs.P.Herbert and Mrs.Joyce Hirst for typing this thesis.

INTRODUCTION.

1.1. A well developed money market may figure crucially in the promotion of economic development by allocating saving into investment in a competitive way as well as by promoting safety and liquidity of financial assets. The Indian rural money market is distinguished by its duality with its organized and unorganized sectors, with different business practices and rates of interest. The organized sector consists of the commercial and co-operative banks and government agencies and the unorganized sector chiefly consists of money-lenders and indigenous bankers of different types, landlords, traders and merchants. Specialization has developed between these sectors and funds sometimes flow between them but their links with one another seem very weak. Against this background, the chief aims of the present study are:

- (a) to investigate the nature, composition and working of organized and unorganized money markets in the Indian rural economy;
- (b) to examine the factors affecting the demand side of agricultural credit;
- (c) to analyse the nature and determinants of rural interest rates;
- (d) to discuss the workings of the major organized agencies;
- (e) to specify the existing links between the dual money markets and to derive any policy implications which may emerge ^{from} our study.

1.2. From time to time, attention has been drawn to the problems with which we are concerned here in certain official and semi-official reports, but little rigorous study has so far been made of the agricultural credit market in India.

Moreover, there have been very few attempts to use quantitative techniques to further understanding of these problems. In the present study, we have tried to use stastical tools to analyse the available data on the subject as far as possible, though we have not ignored qualitative analysis. In this respect our study may claim originality.

1.3. The nature and composition of the dual rural money market is described in detail in the second chapter. In the supply side, it is emphasized that different types of rural money market differ considerably in their activities. The existence of a large unorganized sector has minimised the use of bank credit, prevented the growth of financial assets through which savings could be invested and hindered the operation of monetary policy. It is also shown that neither the money lenders nor the indigenous banks depended much upon the organized sector for funds and the degree of contact between the organized and unorganized financial agencies in the rural economy was poor. This highlighted the necessity to promote further integration between these two markets. It was further observed that between 1951 and 1968, the growth of organized agencies on the supply side of agricultural credit was not much and even in 1968, about two-thirds of total borrowings of the cultivators were provided by the unorganized agencies, particularly by the money lenders. This raised the problem of inadequacies of the
 → existing organized agencies, particularly of the co-operatives, which were supposed to have been the main competitors of the money lenders.

We go on to examine the demand side of agricultural credit in chapter three. In this chapter, some hypotheses about the factors affecting the demand side are tested and some estimates of the relative changes in the significance of some of the explanatory variables are examined statistically. The pattern of borrowing and debt is analysed according to interest rate, asset groups, seasonality, duration and repayments. The choice of periods of our analysis was determined by the nature and availability of data. Careful interpretation is sought to be made of the statistical estimates in view of the nature of available data.

In the fourth chapter, it is argued that the nature of Indian rural money market has generated different types of interest rates. Such rates are then described and an attempt is made to develop a simple model to explain the causes of 'high' interest rates in the Indian rural economy. Here we have concentrated our attention on the determination of 'loan' rates by such factors as risk, uncertainty and the monopoly position of money lenders and an empirical proof of our theoretical model is then given. The relationship between rates prevailing in the organized and unorganized sectors is also examined to find out how far the rates prevailing in the organized sector influence the rates in the unorganized sector. No attempt is made to develop or test a model for explaining the structure of rural interest rates since the division between short and long-term agricultural credit is not always made very clearly by the cultivators and also because the relevant data for testing such a model are not available. Rural interest rates are mostly discussed in 'money' terms.)

In the fifth chapter, the workings of the primary agricultural credit co-operative societies is considered. The choice of credit co-operatives is deliberate in view of their importance as rivals to money lenders. The study is at first carried out at the all-India level but to take account of regional variations, attempts have been made to disaggregate the analysis by undertaking a state-wise study.

Here the main focus of attention is the analysis of the viability of the societies between 1951 and 1968.

In the sixth chapter, the major problem of promoting integration between the organized and unorganized money markets is discussed and an attempt is made to quantify the links between the two sectors. The criteria which are used are straightforward and they are based upon a number of simplifying assumptions. We try to find out indications of the nature and growth of linkages by using several indices. In this connexion, the role of several financial agencies has been described to consider their role in promoting greater integration. It is, perhaps, too early to examine the effects of some recent measures like bank nationalisation and the establishment of rural development agencies. Nevertheless, how far the more recent approaches towards the agricultural sector may be combined with the aim of promoting integration in a dual economy has been indicated. One approach may be to link the commercial banks with the agricultural credit co-operative societies. Apart from easing the credit constraint which is now supposed to exist, such financing has the additional merit of releasing more funds for non-credit societies to be granted by the central and state co-operative banks.

Such loans may be advanced against co-operative bills and this may be a first step towards developing an agricultural bill market. The other method is to standardise the indigenous bills of exchange, i.e., hundis and to take necessary steps to promote their greater use. It is also suggested that little attention has been paid to the 'deposit' rates and such rates may be raised to attract more savings. Such a rise may induce even the money lenders to save, particularly in the off-peak season when agricultural activities are at a low ebb. A rise in deposit rates will tend to push up lending rates, but since the difference between lending rates in the organised and unorganized sector is large, the suggested increase in the deposit rate deserves attention.

Proposals for incorporating the indigenous banks within the organized sector are examined at some length and possible methods of achieving this are suggested. Attempts to promote linkages by a multiple-credit agency approach rather than through a single - credit agency have been made and the possibilities of a multiple - credit approach are discussed and here the role of the commercial banks has been examined in detail. It may be reflected that gains from additional money flow in the agricultural sector may be beneficial if it brings about greater production, a larger marketed surplus and increasing control over the rural money market through monetary techniques. Gains from integration of the dual rural money market may thus be observed in terms of larger income, lower rural interest rates, greater mobilisation of the financial and real surplus and stricter command over the agricultural economy by the monetary authorities.

RURAL MONEY MARKETS IN INDIA: THE SUPPLY SIDE OF AGRICULTURAL
CREDIT AGENCY:

INTRODUCTION.

2.1. The major aims of this chapter are,

- (i) to reveal some of the complexity of Indian rural money markets,
- (ii) to provide a 'feel' for their modus operandi and
- (iii) to consider critically their outstanding problems, as reviewed in the literature.

It is generally believed that a well-developed money market, by allocating saving into investment in a competitive way, plays an important role in the process of economic development. Further, a developed money market promotes liquidity and safety of financial assets. It is observed that in many under-developed countries money markets in rural areas are not homogeneous.¹

The Indian money market is assuredly characterized by duality.²

1 See, for example, U Tun Wai, "Interest Rates Outside the Organized Money Markets of Underdeveloped Countries", International Monetary Fund: Staff Papers, Vol.VI, No.1. November, 1957, PP. 80-142.

2 See, V.R.Cirvante - The Indian Capital Market, Oxford University Press, Bombay, 1956, PP. 1-6. ECAFE: Department of Economic Affairs - Mobilization of Domestic Capital in Certain Countries of Asia and Far East, Bangkok, 1951, P.33. H.V.R. Iengar - Monetary Policy and Economic Growth, Vora & Co., Bombay, 1962, P.193. C.K. Johri - Monetary Policy in a Developing Economy, World Press, Calcutta, 1965, PP. 39-40. H.Roy - Role of Monetary Policy in Economic Development, World Press, Calcutta, 1962. PP.66 - 67. J.S.G. Wilson, "The Business of Banking in India", R.S.Sayers(ed) - Banking in the British Commonwealth, Clarendon Press, Oxford, 1952, PP. 150 - 216. J.S.G.Wilson, - Monetary Policy and the Development of Money Markets, George Allen & Unwin Ltd., London, 1966, PP.243-269.

Wilson observes: "On the one hand, we have the 'central money market' which includes (apart from the Reserve Bank of India) the exchange banks, the Imperial Bank,¹ and the other Indian commercial banks; and, on the other, we have the indigenous market, which consists of a group of bazaar markets, each with different business practices and a different structure of rates. Within both these two main divisions quite a high degree of specialisation has developed, including the provision of facilities for the flow of funds within and between them. The chief weakness lies in the links between the main sections. Until these are strengthened, further integration will be difficult!"²

The main aim of this study is to test statistically - and rigorously - a number of generalisations about the Indian rural money market which have been made in the past. In this chapter, we shall examine the nature and working of the organized and unorganized financial agencies in the Indian rural economy and some of the major problems in their working. We are concerned, here, with the supply side of the agricultural credit market.

2.2. Definition of a Money Market:

At the outset, it is useful to distinguish between the money and capital markets. The capital markets deals with long-term money capital, and the money market with short-term money capital. Sometimes it is difficult to distinguish between the short and long-term since there may be considerable overlap between the two.³

1 Now the State Bank of India.

2 See, J.S.G.Wilson - op.cit., in R.S.Sayers (ed) - Banking in the British Commonwealth, P 203.

3 See, for example, John T.Madden and Marcus Nadler - The International Money Markets, Sir Isaac Pitman & Sons Ltd., London, 1935, P.111. See also, S.L.N. Simha - The Capital Market of India, Vora & Co., Bombay, 1960, P.2.

However, a money market generally caters for the demand for and supply of short-term loanable funds. To quote: "A money market is a mechanism through which a large part of financial transactions of a particular country or of the world are cleared..."¹ In the narrower sense in which the term is generally used, however, a money market includes only dealings in more or less standardized types of loans, such as call loans and in credit instruments, such as acceptances and treasury bills in which personal relations between lender and borrower are of negligible importance. In this sense, a money market is distinct from, but supplementary to, the commercial banking system"¹ To quote another author: "In essence, a money market is a place where the borrower and lender of short-term funds are brought together".²

2.3. Importance of a Money Market.

A money market performs several useful functions. Firstly, it may tend to strike equilibrium between the demand for and supply of loanable funds. Its essential function is to allocate savings into investment. By allocating savings into investment, the money market brings about a rational allocation of resources. Secondly, by promoting liquidity and ensuring safety of financial assets it encourages savings and investment. This is very important in an under-developed economy where saving and investment habits leave much room for improvement. In the rural economy of under-developed countries, savings too often take place in the form of bullion-hoarding and land-holding rather than in the holding of financial assets. Thus, even when there is ability to save, in the absence of a well-developed money market, the community is deprived of an array of financial assets which could lead saving into productive investment.³

¹ See J.T.Madden and M.Nadler, op.cit., P.111.

² See J.S.G.Wilson, op cit., in R.S.Sayers(ed). Banking in the British Commonwealth, P.202.

³ See J.G.Gurley and E.S.Shaw - Money in a Theory of Finances, The Brookings Ins. Washington D.C. 1960, P.49.

Thirdly, a money market ensures the flow of funds from one sector to another and thus promotes financial mobility.¹ Fourthly, a well-developed money market is vital for implementing the monetary policies of the central bank. Finally, an organized money market is essential for providing elasticity in the flow of funds.

It is important to note the relation between the money market and the interest rate. The rate of interest bears the same relation to the money market as price bears to the commodity market. Just as price is determined in the commodity market via the operation of demand for and supply of goods, so the interest rate is determined in the money market by the operation of the demand for and supply of loanable funds.² Just as it may be said that the commodity market is seldom wholly perfect and homogeneous, so it may be argued that the money market is seldom perfect and homogeneous. Since there are several markets within an economy, there is no single interest rate. Further, such rates as exist may be subject to seasonal and cyclical variations depending upon forces of demand and supply. In the next section, the nature and composition of the Indian rural money market will be considered.

1 John T. Madden and Marcus Nadler, *op.cit.* p.130.

2 One should note, here, the distinction between the loanable fund and liquidity preference theories. Which of these applies will depend upon one's particular concern. The former is most useful when one is concerned with the complex of interest rates which go to make up 'the' rate of interest. This is my concern here. The second gives emphasis to the close connection between the demand for money and interest rates. J.R. Hicks was the first to clarify this. See his Value and Capital (London, 1939), Chapter XII. See also J.R. Hicks, 'Mr. Keynes and the Classics : A Suggested Interpretation', Econometrica, 1937.

2.4. 1 Definition of Indigenous Money Market:

It has been observed that the Indian money market may be divided into two broad sections: (1) organized and (2) unorganized. The unorganized market we take as that sector which operates outside the provisions of the Indian Banking Companies Act and maintains private accounts which are not audited. The organized market, contrawise, works under the provision of Banking Companies Act and maintains accounts which are open to audit and regular inspection.¹ The co-operatives are included in the organized sector. Thus while the organized sector is amenable to control, the unorganized sector is not.

2.4. 2 Features of Indigenous Money Market:

The main features that differentiate the unorganized sector from the organized sector of the money market are the following:²

- a) blending of money-lending with other types of economic activities,
- b) informality in dealings with customers,
- c) personal contact with borrowers,
- d) simple system of maintaining accounts,
- e) flexibility of loan operations, and
- f) secrecy about financial transactions.

It is in the light of these special features of the indigenous sector that it is remarked: "It is in the methods rather than in the nature of business that indigenous agencies stand in marked contrast with modern institutions".³

¹ See, M.M.S.Gubbay - Indigenous Indian Banking, Tara poreVala Sons & Co., Bombay, 1928, P.3.

² For details, see, Government of India - The Indian Central Banking Enquiry Committee, Vol.1, Part 1, Majority Report, Calcutta, 1931, PP. 98 - 99. Also, Reserve Bank of India (ie, R.B.I.) All India Rural Credit Survey, (ie, A.I.R.C.S.) Vol.1, part 2, Bombay, 1957, ch 21.

³ See, Gopal Karkal - Unorganized Money Markets in India, Lalvani Publishing House, Bombay, 1967, P.9.

Next, we shall try to analyse the effects of a dual money market on the economy.

2.4.3 Effects of a Dual Money Market.

The dichotomy in the Indian money market has certain effects. Firstly, it has led to restricted use of cheques. Secondly, to supplement the credit needs of the economy, especially of the rural sector, it has led to the growth of a variety of credit instruments. This, again, has minimised the use of bank credit. Thirdly, it has restricted the volume of monetary transactions and perpetuated non-monetized transactions. Fourthly, the presence of a rudimentary and unorganized sector has deprived society of an array of financial assets with which savings could have been more effectively tapped and transformed into investment for the purpose of raising the rate of growth. Finally, the existence of dichotomy has perpetuated some age-old customs like hoarding of gold which have prevented the use of available resources for productive investment.¹ All these complex factors have created various problems for the central bank in using monetary policy more effectively.²

2.5 Classification of the Indian Financial Institutions:

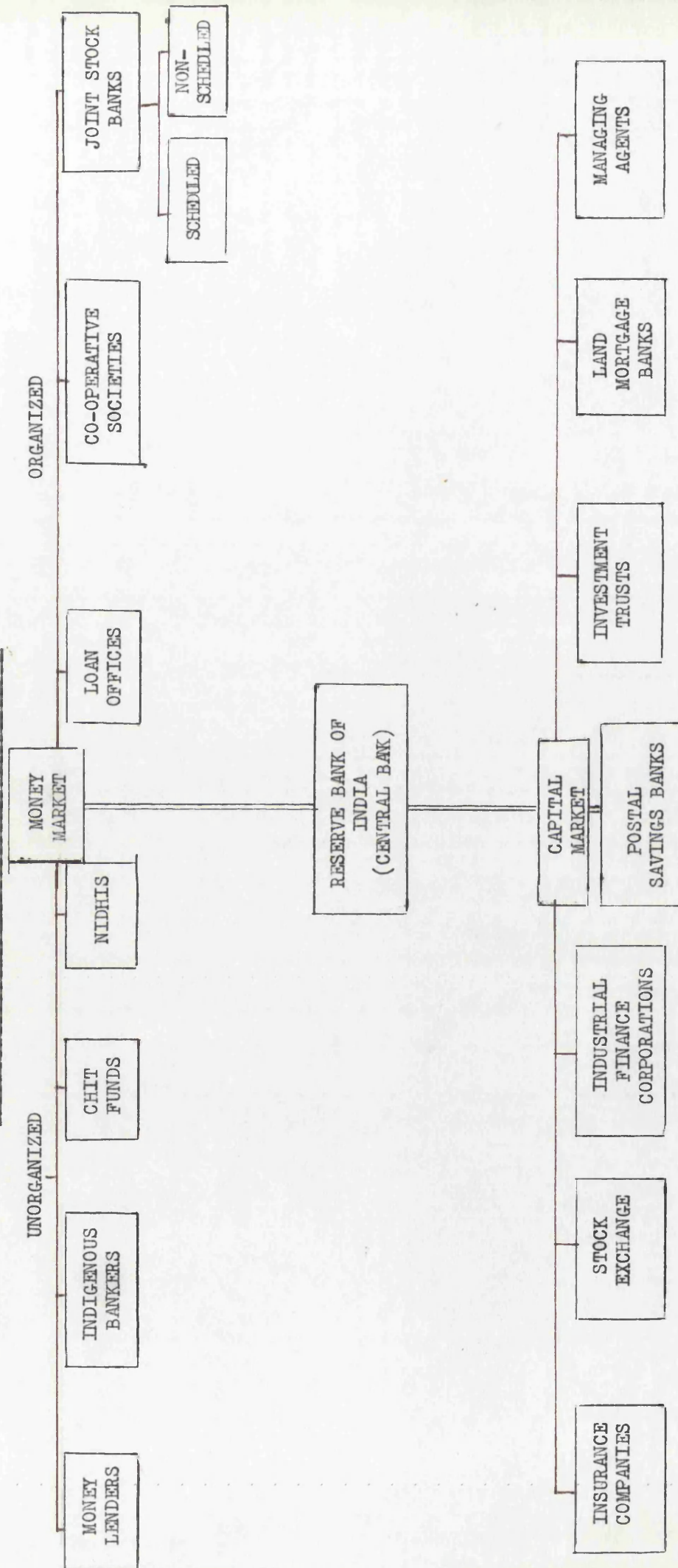
Indian financial institutions may be classified into two broad groups: (a) organized, (b) unorganized; and within these into further sub-divisions. In diagram 1, the overall structure of financial institutions in India is given. Within the organized sector, Reserve Bank of India (henceforth to be referred to as R.B.I.), State Bank of India, the joint-stock banks and various co-operative credit associations are included.

1 One should, perhaps, observe that whether or not gold hoarding prevents productive investment depends upon the end use of the money so spent. It seems likely, however, that those who sell gold will not engage in 'productive' investment. However, if the gold is imported (legally or illegally) there is a definitely negative effect so far as productive investment is concerned.

2 See, H. Roy, op.cit., p. 67.

DIAGRAM 1.

NETWORK OF FINANCIAL INSTITUTIONS OF INDIA



Source: International Monetary Fund : Research Department: Financial Institutions of India : pp. 11-12, 1950.

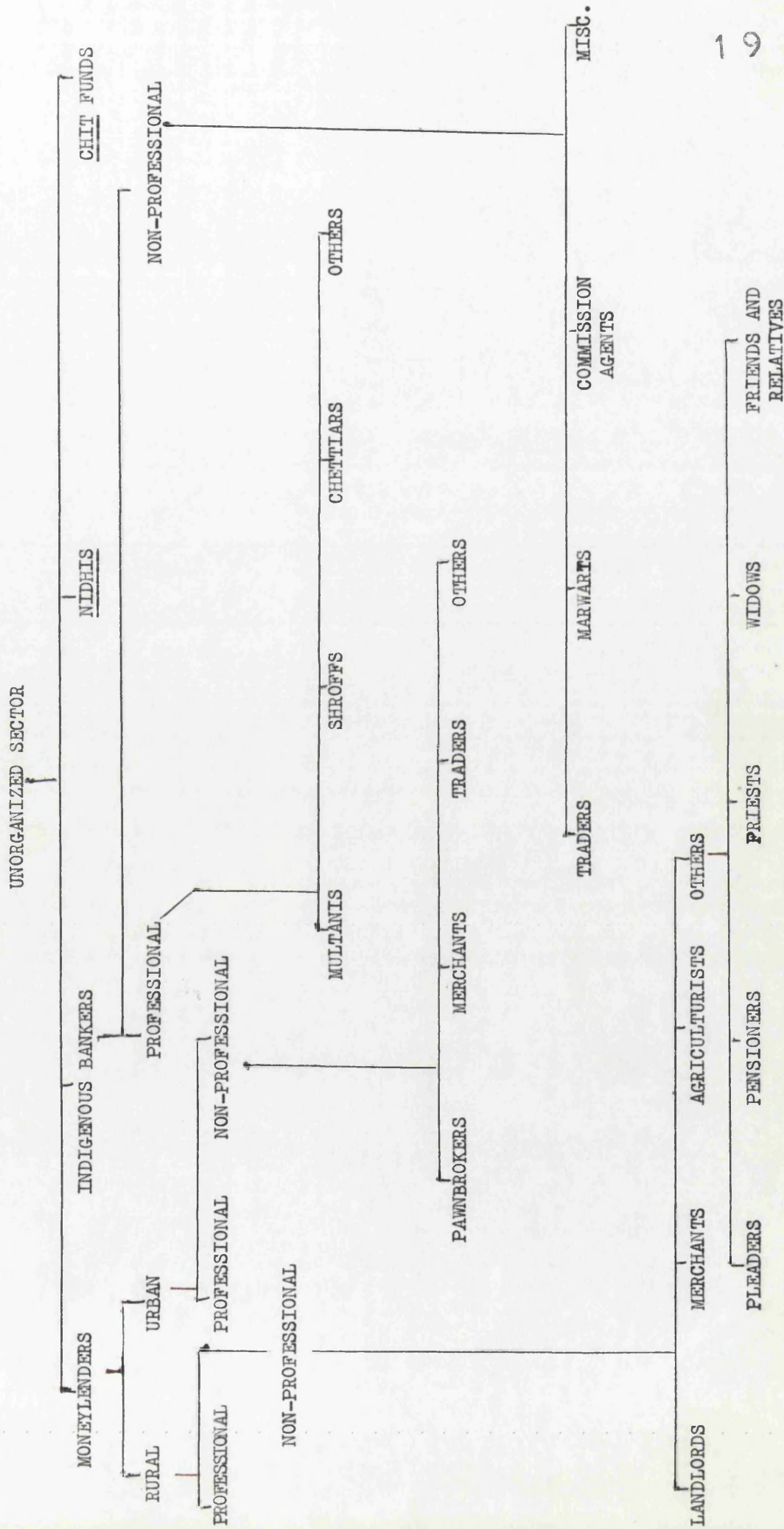
The unorganized sector includes a variety of indigenous financial institutions including the following: a) Indigenous bankers, b) Money-lenders - both professional and non-professional, c) Nidhis, d) Chit funds. In rural areas, money-lenders and indigenous bankers are the overwhelming source of finance to cultivators. It was observed in 1931: "...the money-lender is an indispensable feature of Indian rural economy".¹ Little change was noticed in 1951-2; "The bulk of the credit was supplied by the money-lenders - professional and agriculturist - and as much as about 70 per cent of the rural debt was owed to them".² Other studies have confirmed the strength of the unorganized sector even in 1961 - 2.³ In view of its great importance we shall now examine the structure and working of the unorganized sector in greater detail.

2.6. Classification of the Unorganized Sector:

The unorganized sector in the Indian money market may be classified in the way shown in diagram 2. Money-lenders and indigenous bankers are seen all over India, especially in Tamil Nadu (Madras). The nature of each one of these agencies will now be considered.

1 Government of India - The Indian Central Banking Enquiry Committee. Vol.1. Part 1. P.83, op.cit.
 2. R.B.I. - A.I.R.C.S. Vol.1. Part 2, P.2, op.cit.
 3. See R.B.I. Bulletin, "All India Rural Debt and Investment Survey, 1961-62", September, 1965, PP.1296 - 1393.

DIAGRAM : 2



Source: Gopal Karkal - Unorganized money markets in India, Lalvani Publishing House, Bombay, 1967, p. 21 and p. 45.

2.7. 1 Definition of Money-Lenders:

It is difficult to define precisely a money-lender. Such difficulty mainly arises in the way of distinguishing a money-lender from an indigenous banker since both money-lenders and indigenous bankers combine money-lending with other economic activities like trading or business. The money-lenders are sometimes defined as those "whose primary business is not banking but money-lending".¹ In another report, the distinction between indigenous banker and money-lender is made in the following way:² "The indigenous banker... may also combine banking and business, but in his case banking is primary. This largely a difference in degree and the other differences between the two are of much the same nature. The indigenous banker finances trade and industry rather than consumption: the urban money-lender consumption rather than trade. Both banker and money-lender advance partly with, and partly without, security but the banker more often with than without, and the money-lender probably more often without than with. The banker is generally particular about the objects for which the money is required: the money-lender is less careful. A further difference, and one, no doubt, arising from the last two, is that most of the banker's clients repay punctually, and most of the money-lenders' have to be pressed. The bankers, therefore, can afford to lend at 6 to 9 per cent and rarely goes beyond 12 per cent, but the money-lender commonly charges 9 to 12 per cent and goes up to 18 per cent. The difference is the reflection of greater trouble and risk involved in the urban money-lender's system!"

1 Government of India - The Indian Central Banking Enquiry Committee, (1931) vol. 1, Pt. 1. P. 73. op.cit.

2. Government of India - Report of the Punjab Provincial Banking Enquiry Committee, 1929 - 30 vol.1. Calcutta, 1930, P.130.

In other writings, money-lenders are sought to be distinguished from the indigenous bankers on the ground that while the indigenous bankers mainly accept deposits and deal in hundis (i.e., an indigenous bill of exchange), money-lenders do not usually accept deposits or deal in hundis but are primarily concerned in money-lending.¹ Thus indigenous bankers are defined as those other than Imperial Bank, the exchange banks, the joint-stock banks and co-operative societies and the term meant any individual or private firm lending money, taking deposits and dealing in hundis.² Similarly, it is said: "An indigenous banker, as distinct from a money-lender, or a money-lending trader, was to be identified by one of the two characteristics, viz., the acceptance of deposits and dealing in hundis, specifically associated with indigenous banking".³ It is, however, argued that the above distinction between a money-lender and an indigenous banker is unsatisfactory.⁴ One Banking Committee could not "dissociate from the indigenous bankers the Multani shroffs who do not deal in deposits, but who have for all practical purposes, been regarded as Bankers"⁵ In other reports, indigenous bankers are defined as "individuals or firms who deal in hundis, whether they take deposits or not".⁶

1 See L.C.Jain - Indigenous Banking in India, McMillan, London 1929. P.3
See also S.G.Panandikar - Banking in India, (8th ed.) Orient Longmans, Bombay, 1956. PP. 52 - 56.

2 Government of India - The Indian Central Banking Enquiry Committee, (1931), vol.1. Part 2, P.73. op.cit.

3. R.B.I - A.L.R.C.S. vol.1. Pt.2. P.504. op.cit.

4. See B.C.Ghosh - A Study of the Indian Money Market, Oxford University Press, Calcutta, 1943, PP 144 - 45.

5. Government of India - Report of the Bombay Provincial Banking Enquiry Committee, Vol.1. Bombay, 1930, P 192.

6. Government of India - Report of the Bengal Provincial Banking Enquiry Committee, vol.1. Calcutta, 1930 P.185.

Similarly, Ghosh argued: " Dealing in hundis and not acceptance of deposits is thus made the distinguishing characteristic of the indigenous banker".¹

It appears that a satisfactory way of distinguishing a money-lender from an indigenous banker is to state that the indigenous bankers are those who mainly deal in hundis and who may or may not accept deposits and the money-lenders are those who do not generally deal in hundis or accept deposits but who are mainly interested in money-lending.

2.7. 2. The Number of Money-Lenders.

It is difficult to offer an accurate estimate of the number of money-lenders or of the volume of money that they have invested in agriculture. A pre- Independence account of the numbers of money-lenders is given in Central Banking Enquiry Committee Report, (1931).² But these figures are neither very reliable nor very relevant. It is further admitted that reliable data about capital invested by these agencies are not available.³ In another set of estimate in 1951-2, the number of licenses issued in 1948-9 is stated about six provinces.⁴

1 See, B.C. Ghosh - op.cit., PP. 144- 45.

2 Government of India - The Indian Central Banking Enquiry Committee, (1931), vol 1, Pt.1. P. 72, op.cit.

3 Ibid. P. 73.

4 R.B.I. - A.I.R.C.S., Vol 1, Pt.2. P. 414, op.cit.

TABLE 2.1 VILLAGES, VILLAGE POPULATION AND NUMBER AND PROPORTION OF MONEYLENDERS IN INDIA: 1961

States	Village population in thousands	Number of villages	Number of moneylenders	Number of villages per moneylender	Number of village population per moneylender
1	2	3	4	5	6
Andhra Pradesh	29708	27084	5671	4.78	5238.6
Assam	11296	25702	80	321.28	14120.0
Bihar	42541	67665	1634	41.41	26034.9
Gujarat	15316	18584	1850	9.95	8278.9
Jammu and Kashmir	2967	6559	1010	64.94	29376.2
Kerala	14349	1573	164	9.59	87493.9
Madhya Pradesh	27745	70414	2105	33.45	13180.5
Maharashtra	28391	35851	3590	9.99	7908.4
Mysore	18320	26377	1911	13.80	9586.6
Orissa	16439	46466	430	108.06	38230.2
Punjab	8567	21269	262	81.18	32698.4
Rajasthan	16874	32240	4473	7.21	3772.4
Madras (Tamil Nadu)	24696	14124	8010	1.76	3083.1
Uttar Pradesh	64266	112624	4920	22.89	13062.1
West Bengal	26385	38454	2955	13.01	8928.9

Source: Government of India. Census of India, 1961, vol. I, Part II - B(i), General Economic Tables, p. 634.

Note: In the final column, there seems to be a great divergency which could be partly explained by faulty data. It also reflects, however, very real regional differences.

A third set of estimate is provided in the census of India (1961) and this is shown table 2.1. We have calculated villages and village population per money-lender to find out state-wise variations. It is revealed that Madras (now Tamil Nadu) had 1.76 villages per money-lender whereas Assam had 321.28. Similarly, village population per money-lender was lowest in Madras (3083.1) and highest in Assam (114120.0). The table highlights much regional variation. Such variation may, perhaps be accounted for by the difference in the level and nature of economic activities, rate of growth of output in the agricultural sector and the availability of the alternative lending agencies.

2.7. 3. Classification of Money-Lenders:

Money-lenders are generally classified as (a) professionals *Professionals in Dy. M. & Credit* and (b) non-professionals. Although the division is not watertight, it may be said that professional money-lenders are those whose primary concern is money-lending and non-professional those who are mainly engaged in other activities and to whom money-lending is not of primary importance. It is contended that an agriculturist money-lender is one " whose major profession is agriculture and whose money-lending business is comparatively of minor importance. The category of professional money-lenders was defined to include all those who earned a substantial part of their income from money-lending and who could not be classified as agriculturist money-lenders".¹ The non-professional group of money-lenders includes heterogeneous sections like landlords, traders, pensioners, pleaders, widows etc. This group lends their surplus funds from time to time to earn some income. Karkal, on the basis of his samples of observations doubted the presence of typical professional money-lenders in large numbers.²

1 R.B.I. - A.I.R.C.S. vol.1. Pt.2. P.1., op.cit.
2 Gopal Karkal - op.cit., P.22.

Money-lenders are also classified as (a) rural and (b) urban. The distinction mainly stems from the difference in the area of operations of money-lenders. Both types of money-lenders advance a large proportion of total loans against personal security.¹ In urban areas, both professionals and trader - cum- merchant - cum - money-lenders finance mainly trade and commerce.² While most of the village money-lenders advance kind loans, 80.4 per cent of town money-lenders do not make such loans.³ Further, among the village money-lenders, 94 per cent enquire about the purpose of loan and 46 per cent of those who enquired watched the actual utilization. Among urban money-lenders, 78 per cent enquired the aims of loans and 75 per cent of those who enquired did not watch the actual utilization.⁴ It was also revealed that in regions other than Bihar, Bengal, Punjab, Rajasthan and South Deccan, the proportion of village and urban money-lenders who gave individual loans exceeding Rs. 500.00 was not high.⁵ Nearly two-thirds of the village and urban money-lenders said that only 10 per cent or less of total loans advanced was doubtful.⁶ Nearly 12 per cent of village money-lenders reported that they advanced against standing crops and roughly 11 per cent of the respondents gave loans against harvested crops and produce.⁷

1 R.B.I. - A.I.R.C.S., vol.1. Pt 2, PP. 484-485, op. cit.

2 Gopal Karkal - op cit., P.28.

3 R.B.I. - A.I.R.C.S., vol.1. Pt 2, P. 472, P. 496, op. cit.

4 Ibid. P.474 and PP. 499 - 500.

5 Ibid. PP.468 - 9 and P. 494.

6 Ibid. P.475 and P. 502.

7 Ibid. P.470.

For the urban money-lenders, the relevant shares were 9.2 per cent and 10.9 per cent respectively.¹ It was found that about 7 per cent of the village money-lenders and about 14 per cent of urban money-lenders accepted deposits.² Thus deposit acceptance was not a very important activity of money-lenders. Again, about 14 per cent of urban money-lenders and 10 per cent of village money-lenders were also non-cultivating landowners.³ From the above, it follows that both rural and urban money-lenders generally follow the same principles in granting credit.

Sometimes, cultivators themselves lend to other cultivators. It has been pointed out that "among the cultivators, it was mainly the large cultivators, and in particular the big cultivators, who undertook lending activities in substantial scale".⁴ The nature of lending of this type of cultivator follow the general pattern of lending of village money-lenders.

1 Ibid. P.498

2 Ibid. P.477 and P. 502.

3 Ibid. P.492

4 Ibid. P. 527. It was also reported that a large proportion of total loans was given to big cultivators.

2.7. 4 Importance of Money-Lenders:

In the absence of growth of institutional agencies, money-lenders have played an important part in Indian agricultural finance. Thus, in 1951 - 2 private credit agencies consisting of money-lenders, relatives, landlords and traders accounted for about 93 per cent of the total borrowing of cultivators. Here again, the professional and agriculturalist money-lenders accounted for about 70 per cent of total borrowing. In sharp contrast, the combined share of all the organized agencies like banks and co-operatives was as low as 7.3 per cent of cultivators' total borrowing. This is illustrated in table 2.2.

Table 2.2. BORROWING OF CULTIVATORS FROM DIFFERENT SOURCES.

CREDIT AGENCY	Proportion of borrowing from each Agency to total borrowings of cultivators (Per cent)
Government	3.3
Co-operatives	3.1
Relatives	14.2
Landlords	1.5
Agriculturist Money-lender	24.9
Professional Money-lender	44.8
Traders and Commission Agents	5.5
Commercial Banks	0.9
Others	1.8

Source. R.B.I. - A.I.R.C.S. Vol.11, Bombay, 1954, P.167

In one report, it is said that the money-lender's, "presence has to be tolerated as a necessary evil for many years to come".¹ It was suggested that, "in implementing legislation intended to restrict and control the activities of money-lenders, Government should take note of the pace at which alternative machinery of satisfactory type can be made available to agriculturists, and that nothing would be gained by depriving the majority of the agriculturists of even the existing facilities for credit long before alternative supply could be arranged".²

Three schools of thought on the question of reducing the predominating influence of money-lenders in India can be discerned over time. While one group advocated that since not much can be done about a change in the activities of money-lenders for quite a number of years to come,³ they should be left alone, the other group argued the elimination of money-lenders in future.⁴ The third group considered the possibility of absorption of money-lenders in the system of rural credit and introduce competition with money-lenders by establishing a suitable alternative.⁵ According to another school, the commercial bank should be subsidized by the state to extend their branches in rural areas. But such idea did not find much favour in the Report of the Rural Banking Committee where it was argued that banking was not 'an infant industry' to be protected.

1 Government of India, Ministry of Finance, Department of Economic Affairs - Report of the Rural Banking Enquiry Committee (1950) Delhi, 1953, P.52.

2 Ibid. P.52.

3 Ibid. P.52.

4 See R.B.I - A.I.R.C.S. Vol.11. P.481, especially this remark: "It is certainly obvious that the money-lender can be allotted no part in the scheme, important or insignificant, notwithstanding a dominance which today is overwhelming". op. cit.

5 Government of Madras, B.V.Naryanaswami Naidu - Report of the Economist for Enquiry into Rural Indebtedness. (1946), Madras, 1946 P.68. See also, Government of India - Report of the Agricultural Finance Sub-Committee, 1945. PP. 31-32.

The Indian government broadly accepted the proposal of A.I.R.C.S. for gradually reducing, if not eliminating, the importance of money-lenders by strengthening the co-operatives as an alternative source for supplying rural credit. Of late, it has set up the Agricultural Refinance Corporation, Agricultural Credit Corporations and Small Farmers' Development Agencies. Later in our analysis, we shall try to examine how far the effects of government have been successful.

2.7. 5 Operations of Money-lenders:

It is possible to list briefly some of the major operations of money-lenders:¹

- a) The money-lender has a very good knowledge of the character and repaying capacity of the borrower.
- b) The money-lender can be both rigid and elastic in his operations.
- c) Loans are largely granted against personal security.²
- d) Money-lenders generally know the borrowers personally and the borrowers can approach the lenders easily.
- e) In many cases, credit is granted for family expenditure of the borrowers.³
- f) The money-lender has different types and extent of control over the borrowers. Such forces are mainly socio-economic in character. Such forces are exhibited in the form of "loss of face or local prestige", caste disapproval or pressure through local self-governing bodies, ie, panchayats. The economic force lies in possible drying up of the source of credit.

1 For a comprehensive study, see, R.B.I- A.I.R.C.S. vol.11, PP.171-177 op.cit.

2 See R.B.I - A.I.R.C.S., vol.1.Pt.2, PP. 484-485, op.cit.

3 Ibid. P. 482 - 3.

Within a village community, there are also other types of control. Bailey argues that dominant castes could employ coercive measures upon members of lower castes.¹ Gough illustrated how these coercive measures varied between paying fines to the temple funds operated by the high caste Brahmins and the eviction of peasants from land in extreme cases.² In this connexion, Srinivas argues: "The three main axes of power in the caste system are the ritual, the economic, and the political ones, and the possession of power in any one sphere usually leads to the acquisition of power in the other two. This does not mean, however, that inconsistencies do not occur..."³ Similarly, Bailey contends: "There was a high degree of coincidence between politico-economic rank and the ritual ranking of caste. This is a reflection of the general rule that those who achieve wealth and political power tend to rise to the ritual scheme of ranking".⁴

1 See, F.G. Bailey - Tribe, Caste & Nation, Manchester University Press, Manchester, 1960, P.258.

2 See, Kathleen Gough, "The Social Structure of a Tanjore Village", McKim Marriott (ed.) - Village India, The University of Chicago Press, Chicago, 1955, P.44.

3 See, M.N.Srinivas - Caste in Modern India and other Essays. Asia Publishing House, London, 1962, P.45.

4 See, F.G. Bailey - Caste and the Economic Frontier, A Village in Highland Orissa, Manchester University Press, Manchester, 1957, P.266.

But while examining the cause of land sale by peasants, Bailey did not think that "persuasiveness of the money-lender" was the only cause. "His character and his chicanery are an aggravating and marginal factor in a process which has more fundamental prime causes"¹ These "prime causes" were, according to Bailey, peasants demand for cash and his initiative and not "the financial wiles of a money-lender".² Beteille has shown that some of these money-lenders are persons of small means, eg, widows and old pensioners³ and with the improvement of the bargaining position of the tenant and provision of alternative sources of credit, the power of dominant caste as well as of money-lenders has declined to-day.⁴

2.7. 6 Money-lenders' Rate of Interest:

It is difficult to state precisely the interest rates charged by different types of money-lenders in different parts of India. Some such estimates are, however, available in the A.I.R.C.S.⁵ The evidence suggested that in some cases, such rates tended to be 'high'. It was also noted that existing legislative controls over maximum interest rate to be charged by money-lenders were hardly effective.⁶ We shall examine, at a later stage of our analysis, how far such 'high' rates can be explained by some such factors as risk, uncertainty, administrative cost and monopoly power of money-lenders.

1 Ibid. P.48.

2 Ibid. P.58.,

3 See Andre Beteille - Caste, Class & Power : Changing Patterns of Stratification in a Tanjore Village, University of California Press, Berkeley and Los Angeles, California, 1965, P.136.

4 Ibid. P.135.

5 R.B.I. - A.I.R.C.S., Vol.1.Pt.2. PP.488-9 and PP.558-9, op cit.

6 R.B.I. - A.I.R.C.S., Vol.11. P.174, op cit.

2.7. 7. Malpractices of Money-lenders:

There is evidence to suggest that money-lenders, because of their dominance over rural credit, have had resort to several questionable practices. The most usual types have been:

- "a) demand for advance interest.
- b) demand for a present for doing business, known as girah kholai (purse opening)
- c) taking of thumb impression on a blank paper with a view to inserting any arbitrary amount at a later date if the debtor becomes irregular in payment of interest.
- d) general manipulation of the account to the disadvantage of the debtor,
- e) insertion in written documents of sums considerably in excess of the actual money lent, and
- f) taking of conditional sale deeds in order to provide against possible evasion of payment by the debtor".¹

Moreover, it has been observed: "While it is true that the money-lender is the most important constituent of the agricultural credit machinery of the country, it is not possible to justify many of his practices and the charges he makes for his services. Very often these charges are out of all proportion to the risk involved in the business and constitute an exploitation of the helplessness, ignorance and necessity of the borrower. Nor is the agricultural economy of the country in a position to bear the strain of his extortion. The credit dispensed by him instead of contributing to the agricultural prosperity of the country serves as a serious drag on it".²

1 Government of India - The Indian Central Banking Enquiry Committee (1931), vol.1. Part 2, P.77, op.cit.

2 Government of India - Report of the Agricultural Finance Sub-Committee (1945) P.59, op.cit.

To what extent the money-lenders have discarded such practices at present is difficult to say. But how far the operation of institutional sources of finance were successful in reducing such practices can be studied in connexion with the analysis of working of the organized sector in Indian agricultural economy.¹

2.8. 1 The Indigenous Banker: Feature and Size:

It has already been observed that the distinguishing feature of an indigenous banker lies not in accepting deposits but in discounting hundis.² It is very difficult to make an estimate of their number at present. It is equally difficult to measure the amount of capital invested by indigenous bankers in the Indian money market. It is observed: "No reliable statistics of such persons or of the magnitude of their operations are, however, available, nor is it possible to distinguish clearly between bankers or shroffs and money-lenders. Although these persons will continue to play a significant role in the credit structure of the rural areas for years to come, it is apparent that their importance and activities are generally on the decline, particularly due to the stringent provisions of acts for the regulation of money-lenders and debt relief, and legislation affecting land tenures...Many of them appear to have restricted their activities, or withdrawn from the field altogether, and taken to urban trade and investment".³

However, no statistical evidence is cited to justify this conclusion.

1 See, ch. 6.

2 See 2.7.1. this chapter.

3 Government of India - Report of the Rural Banking Enquiry Committee (1950), PP. 15 - 16, op.cit.

2.8. 2 Differences in the functions of Indigenous Bankers, Money-lenders and Modern Bankers:

The differences in the functions of money-lenders and indigenous bankers may be briefly summarised: Whereas money-lenders usually give loans to cultivators and petty-traders in the rural areas, indigenous bankers tend to give loans to trade, commerce or industry; money-lenders are less organized; their loans are generally smaller; their periodical turnover is generally less than that of the indigenous banker; money-lenders are present almost everywhere whereas indigenous bankers operate mainly in commercial centres; and interest rates charged by money-lenders are usually greater than those charged by indigenous bankers.¹

The following distinctions are observed between indigenous bankers and modern bankers of the European type.² Deposits of indigenous bankers form only a small proportion of total resources but these are generally the major source of working capital of modern bankers; modern bankers specialize exclusively in the banking business, but indigenous bankers generally combine banking with trading activities; both allow withdrawal of deposits, but in the case of modern bankers, withdrawal is usually made in cheques, while in the case of indigenous bankers withdrawal is made in cash.

1 See, for illustration, Gopal Karkal - op.cit., PP. 45 - 80

2 See, L.C.Jain - op.cit., PP. 42 - 3.

2.8. 3 Classification of Indigenous Bankers:

It is possible to classify indigenous bankers broadly in three groups:¹

- (a) those who mainly participate in banking activities,
- (b) those who are mainly traders or merchants but employ their excess resources in banking activities,
- (c) those who blend banking with trading business.

In view of the established fact that almost all indigenous bankers combine banking with other types of activities, it seems really difficult to distinguish between pure and non-professional indigenous bankers and to that extent the distinction which writers like Karkal attempt to make, seems artificial.²

In 1951-2, it was revealed that out of 199 reporting indigenous bankers, 82 were traders in agricultural goods, 36 were general merchants, 48 were brokers or commission agents or both, 18 were goldsmiths and jewellers and 39 had no occupation other than indigenous banking.³ A further source of confusion lies in Karkal's inclusion of Chettians among both professional and non-professional indigenous banking sector.

As it has been observed that dealing in hundis is a major function of indigenous banker, it is necessary now to discuss the mechanism of hundi transactions.

1 Government of India - The Indian Central Banking Enquiry Committee (1931) Vol.1 Pt.1. PP. 94 - 110, op. cit.

2 See, Gopal Karkal - op. cit., P.45.

3 R.B.I. - A.I.R.C.S. vol 1, pt 2. PP. 506 - 7, op. cit.,

2.8. 4.1 Nature of Hundi:

In most of the available literature, the hundi is defined as an indigenous demand or usance bill of exchange. According to Jain: "... a hundi may be defined as a written order - usually unconditional made by one person or another for the payment, on demand or after a specified time, of a certain sum of money to a person named therein".¹

Jain argues that defined in this way the hundi differs in one important respect from the English bill of exchange, to the extent that a particular type of hundi - for example, JoKhami hundi - may not be an unconditional order though an English bill of exchange must be so. However, apart from some minor stylistic differences of hundi which emanate from its drafting, the more important difference between the hundi and an English bill arises from the fact that whereas an English bill plays an important part in financing the country's trade, the hundi does not. Further, hundis, unlike English bills, do not have wide acceptance since they may not be drawn against commercial goods. PareKh argues that hundis are genuine trade and not accommodation or finance bills.²

1 L.C.Jain - op.cit. P.71.

2 H.T. PareKh - The Bombay Money Market, Oxford University Press, Bombay, 1953, P.47.

However, it is difficult to say that a hundi is always a trade and not a finance bill. Karkal defined the hundi in a simpler way:

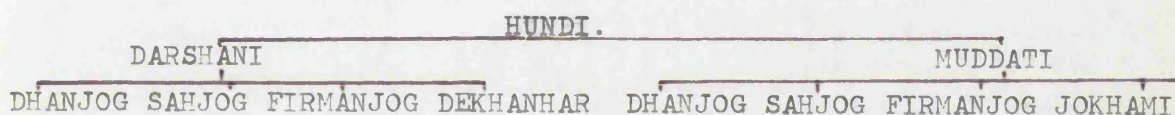
"Hundi is the credit instrument for raising short-term finance generally in smaller amounts".¹

This definition clearly explains the nature of hundi as an instrument of credit for facilitating rural finance in the short period.

2.8. 4.2. Classification of hundis:

Hundis may be classified into two broad groups: (a) demand bills or Darshani hundis : (b) usance bills or Muddati hundis. The following illustration could be made to understand clearly the different types of hundis.²

TYPES OF HUNDI.



The Sahjog hundi is payable to a respectable person whereas the Dhanjog hundi is payable to any ordinary person. Such a division may have some sociological implications. In the case of the Sahjog hundi, it is the duty of a banker to see when the hundi is cashed, the proper person receives the payment; no such obligation is involved in the case of Dhanjog hundi. The Firmanjog hundis are made payable to order. The Jokhami hundis are generally drawn against goods sent on condition that should the goods be lost in transit, the loss is to be suffered by the hundi holder. Dekhanhar hundis are generally payable to the bearer.

1 Gopal Karkal - op.cit., P.47.

2 L.C.Jain - op.cit., P.70 - 83.

Jain also describes Nakal or an advice of a hundi.¹

This occurs when a broker or a merchant draws a hundi on another merchant in another centre, he may send Nakal or advice to the other merchant and in such Nakal, the name of the drawer, the name of the payee, the duration and the amount are stated. Without such Nakal or without collaboration of such Nakal with the hundi, the hundis are not discounted. However, hundis are seldom dishonoured.

Hundis may be of different amount and in the case of the Muddati hundis, of different usance varying from 11 to 361 days. Sometimes, a grace period is granted.²

2.8. 4. 3 Transactions in hundi and their rates:

It is observed that the average number of demand hundis dealt in, per banker in 1951-2 varied from 32 in Coimbatore to 4,000 in Ahmedabad. Taking the aggregate of all bankers, each banker dealt in 377 demand hundis on the average. The average amount per demand hundi dealt in, varied between Rs. 500.00 (Sagar) and Rs. 20,000.00 (Shahjahanpur). The average amount per usance hundi ranged from Rs. 1,100.00 (Malabar) to Rs. 5,000 (Sirohi and Satna). The average amount involved in hundis dealt in during one year per indigenous banker dealing in hundis varied from Rs. 75,000.00 to Rs. 75 lakhs in case of demand hundis, and from about Rs. 0.31 lakhs to Rs. 3.35 lakhs in case of usance hundis.³

The rates of discounting hundis are different in different parts of the country and they may have some correlation with rates in the organized sector. They also show some seasonal fluctuations and all these are discussed later.⁴

1. Ibid., P. 78 - 80.

2. Ibid., P. 80.

3. R.B.I. - A.I.R.C.S., vol 1, Pt.2, PP. 517 - 524 op.cit.,

4. See chapter IV.

2.8.5.1. The Multani Bankers:

It is sometimes argued that among different types of indigenous bankers, a Multani banker plays an important role in the Indian rural money market. The argument is made on the following grounds:¹

(a) Multani bankers' loans are generally unsecured and they are granted against hundis. They generally lend to the unorganized sector and obtain a part of their funds from joint-stock banks by rediscounting hundis. In fact, they get concessional rates from the State Bank of India because while the Commercial banks lend to Multani banks at 7 per cent rate, the State Bank charges 6½ per cent. The limits up to which Multani banks may obtain loans by rediscounting hundis varies between Rs. 25 crores to Rs. 30 crores.²

(b) The total amount of loans granted by Multani bankers amounted to Rs. 100 crores in 1960 - 61 in one estimate. In another estimation in 1964, the annual turnover of about 350 Multani bankers operating all over the country was about Rs. 150 crores.³ The total loan is generally disbursed among 3 to 4 lakhs of rural and urban borrowers and especially to those who do not receive credit from joint-stock banks.

¹ See, Camellia Punjabi, "Multani Bankers - Their Role in the Indian Money Market", The Journal of the Indian Institute of Bankers, vol.XXXI, No.4, October, 1961, PP.260 - 265

² See, N.K.Karanjia, "The Role of the Indigenous Banker in India" The Journal of the Indian Institute of Bankers, vol.XXXV, No.2, April 1964, P.118.

³ Ibid. PP.117 - 121.

2.8.5.2. Differences between Multani and other Indigenous Bankers:

Multani bankers differ from other indigenous bankers in certain respects:

(a) While many of the other indigenous bankers accept deposits, Multani bankers do not.

(b) While most of these loans of indigenous bankers are secured, those granted by Multani bankers are not.

(c) Contrary to the practice of other types of indigenous bankers, Multani bankers grant loans only to traders because banks discount hundis only when they are drawn on traders.

(d) Although Multani bankers generally have large own resources, still contrary to the ways of other indigenous bankers, they lend only a small part of their funds because otherwise the joint-stock banks may refuse to provide rediscount facilities.

(e) Multani bankers generally carry out pure banking activities while most of the other types of indigenous bankers combine banking with other types of economic activities.

2.8.5. 4. Present Position of Multani Bankers:

It is contended that the condition of about 300 Multani bankers remained stagnant between 1951 and 1961.¹ An explanation of this has been found in the policy pursued by the R.B.I. As a result of this commercial banks have little incentive to form their liquidity via investment in Multani bills because should the commercial banks require, they are encouraged to borrow from the R.B.I. either under the Bill Market Scheme or against government securities. Such a policy is supposed to have clouded the future of Multani bankers. The main objection of the R.B.I. against Multani bills, is that they are not genuine trade bills but are accommodation bills.² However, an accommodation bill is difficult to define, except in terms of such statements that accommodation bills do not represent a specific business transaction and in India, the standard practice for many years has been to borrow against hundis based on the general financial standing of the borrower rather than on any specific transaction. Again, had Multani bills been only accommodation bills, the State Bank would not have lent to Multani bankers an amount as high as Rs. 20 crores. It has been argued that the RBI should allow the commercial banks to invest in Multani bills up to 5 per cent of the liquidity ratio and this would help Multani bankers to obtain fund of about Rs. 50 crores - nearly double the amount of fund that they received in 1960. "The Reserve Bank cannot possibly ignore the role of Multani Bankers who are one of the well-organised institutions in the money market and it should try to integrate them with other institutions of the money market".³ Punjabi's proposal certainly deserves careful consideration by those keen to promote further integration.

1 Ibid. P.265.

2 See, Camellia Punjabi, "Multani Bankers: Their Role in the Indian Money Market", The Journal of the Indian Institute of Bankers, Vol. XXXIII, No. 1, January, 1962. PP. 43 - 48.

3 Ibid. P.48.

2.8.6. Interest Rates charged by Indigenous Bankers:

It was argued above that the interest rates charged by indigenous bankers on loans were generally lower than those charged by money-lenders. Available statistical evidence seem to confirm this. In a large number of cases the interest rate varied between 3 per cent and $12\frac{1}{2}$ per cent.¹ In a few cases, of course, rates went up to 18 per cent. However, this will be analysed in greater detail at a later stage of our analysis.

2.8.7. Contact between Indigenous and Joint-Stock Banks:

In India, the commercial banks maintain an approved list of indigenous banks with whom they carry out transactions via granting loans and discounting hundis. The joint-stock banks generally maintain a ceiling for granting credit to indigenous banks and this ceiling depends upon the credit - worthiness of indigenous banker. Generally, commercial banks do not accept hundis from small traders with the endorsement of an indigenous banker to avoid risk. After the transformation of the Imperial Bank into the State Bank, the process of discounting hundis has not been discarded by the State Bank of India.

The degree of contact between the indigenous banker and the joint-stock banks is partly indicated by the interest rate prevailing in the 'bazaar' and in the organized money market. Such contact is also reflected in the fluctuations and trends of these two rates. Moreover, the volume of credit given by joint-stock banks to indigenous banks as a proportion of total credit advanced can also indicate the degree of contact between joint-stock and indigenous banking.

¹ See, Government of India - The Indian Central Banking Enquiry Committee, vol.1. pt.1. PP.100 - 102, op.cit., Also, R.B.I. - A.I.R.C.S. vol.1. Pt.2. P.513, op.cit..

It is, however, difficult to get a statistical estimate of such funds. To the extent that such funds are only a small proportion of total credit advanced by joint-stock banks, the link is bound to be tenuous.

Each indigenous bank usually has accommodation facilities with more than 4 or 5 joint-stock banks. Thus the annual turnover of the banker is 4 to 6 times greater than his own capital.¹ The size of the annual turnover of the indigenous bank depends upon its own funds, its borrowed capital, the magnitude of the limits set by commercial banks and the number of accommodating banks. Generally, indigenous bankers utilize their own funds for granting credit and carry out other types of transactions and then try to obtain loans from commercial banks and other agencies.² Sometimes, the commercial banks grant accommodation by (a) discounting the demand promissory notes signed by two bankers, (b) discounting the hundis signed by two bankers, (c) discounting other types of securities.³

Mostly, loans are granted not only on the basis of the type of securities offered but also on the basis of the personal integrity of indigenous banker.

1 Gopal Karkal - op.cit., P.68.

2 Ibid. P.68.

3 See, N. K. Karanjia - op.cit., P.118.

It is generally complained that indigenous bankers do not get the same facilities as other commercial banks. This might be because of the blending of banking with the non-banking activities of indigenous bankers as well as the failure to keep balances with the State Bank. Again, all classes of indigenous bankers do not get liberal assistance from commercial banks.¹ It is said that in Calcutta, indigenous bankers directly approach commercial banks for accommodation while in Bombay, although the indigenous bankers apply directly to commercial banks, the negotiation takes place through brokers whose services are paid for by indigenous bankers.

2.8.8 Defects of Indigenous Banking:

Several defects may be noted in the working of indigenous banking in India.²

(a) The indigenous banker pays very little attention to deposit - banking - a task which a modern banker considers essential. Failure in deposit banking has led to the failure to mobilize rural savings into productive investment.

(b) The indigenous banking system suffers from a lack of organization and effective leadership. There is little connexion between indigenous bankers and joint-stock banks. In fact, there exists too many markets with different rates on similar instruments.

(c) The small use of hundis has made the link between joint-stock and indigenous banking weak and this emphasizes the necessity of establishing a bill market for dealing with agricultural bills.

(d) A defective system of maintaining accounts is considered as another obstacle to bringing the indigenous banks within organized finance.

(e) Blending of banking with non-banking activities has prevented indigenous bankers from specializing in purely banking activities.

1 Bimal C. Ghosh - op.cit., P.151.

2 See, L.C.Jain - op.cit., Ch.VII.

(f) Indigenous bankers do not allow other monetary authorities like the R.B.I. or State Bank to audit their accounts. Nor do they submit any periodical returns to the R.B.I.

2.8.9 Future of Indigenous Banking System:

There are two basic problems associated with the future of indigenous banking in India. The first is one of reformation of the existing indigenous agencies so that they can be brought within the organized financial sector.¹ The second problem is one of creating an alternative organized and efficient agency to compete with indigenous banks in order to reduce, if not eliminate, their influence.² As regards the first problem, it may be said that the R.B.I. in the past, tried to integrate indigenous banks with organized banking by laying down the following rules:

(a) the indigenous banker should register himself as a Banking Company under the Banking Companies Act and thereby make himself automatically eligible for such facilities as are enjoyed by the joint-stock banks.

(b) the indigenous banker should fulfil three rules; ie

- i) dissociate himself from trading activities,
- ii) maintain proper accounts,
- iii) submit himself to inspection.

Ironically, the first condition "was not needed and the second was not heeded".³ and as such the desired integration could not take place. Even now the R.B.I. has not been successful in inducing indigenous bankers to accept the above rules because of the intransigence of indigenous bankers in accepting these conditions.

1 See, L.C.Jain - op.cit., P.237.

2 R.B.I. - A.I.R.C.S. vol.11, P.329, op.cit.,

3 Ibid. P. 325, See also, R.B.I. - History of the Reserve Bank of India, (1935 - 51), Bombay, 1970, PP.488 - 9

2.9. 1 Nidhis and Chit Funds: Description.

The Nidhis and Chit Funds are mainly found in South India, especially in Madras.¹ Nidhis are treated as quasi-banking institutions which initially were mutual loan associations.² They accepted deposits either in the nature of proper deposits or in the nature of withdrawable share capital paid in monthly instalments.³ Nidhis granted loans for all purposes. Out of 228 Nidhis in Madras in 1929, 123 were concentrated in one district. Total paid-up capital of all these Nidhis was about Rs. 2½ crores and their deposits and reserve fund was roughly equal to Rs.1½ crore.⁴ Generally, the members received loans at about 6½ per cent interest rate,⁵ but in case of surplus funds, loans were granted even to the non-members. Recent estimates are not available of the financial position or transactions of either Nidhis or Chit Funds.

1 See, S.K. Muranjan - Modern Banking in India. New Book Co., Bombay, 1940, PP.145 - 147.

2 Government of India - The Indian Central Banking Enquiry Committee, vol 1, Pt.1. P.34, op cit.,

3 Ibid. P.34.

4 Ibid. P.34.

5 Government of India - Report of the Madras Provincial Banking Enquiry Committee, vol.1, Calcutta, 1930, P.33.

2.9. 2 Chit Funds:

Chit Funds are mainly seen in Madras and in the former state of Travancore.¹ These Chit Funds are voluntary but loose associations for mobilising rural savings. The exact number of Chit Funds is not known. Usually, some persons decide to make periodical payments to one among themselves - the Chit promoter who gets the first collection as his due. Each successive collection is given to one of the members according to different methods, the most simple method is to give it to the members of the Chit in rotation, the order of granting collection is decided by lottery. Chits are also organized on the basis of needs.² Some of these funds are well-organized, but in many cases, they are mismanaged by the promoters, who happen to be dishonest. In some cases, the chief appeal of these funds lies in their gambling nature.³

2.9. 3 Reforms of Nidhis and Chit Funds:

Several suggestions have been made in the past for the reform of Nidhis and Chit Funds.⁴ For example, a) they should be controlled by a special law. b) They should convert themselves into pure banks and function within the Banking Act, particularly, in matters of withdrawability of share capital. c) Nidhis should not be allowed to trade though they may be permitted to receive working capital in the form of share-capital paid up in small instalments. d) The accounts of the Nidhis should be duly audited and their balance - sheet published.

1 Ibid. PP.195 - 219

2 R.B.I. - A.I.R.C.S. vol.11, PP 338 - 40, op cit.,

3 See, S.G. Panandikar - op cit., P.149.

4 Government of India - The Indian Central Banking Enquiry Committee, vol.1, Pt.1. PP.199 - 200, op cit.,

As regards Chit Funds, it has been suggested that their promoters should be licensed and the Provincial government should decide whether a property qualification should not be prescribed for granting such licenses. Further, each Chit Fund must be separately registered under provisions of new law. However, these recommendations were not implemented.

The other suggestion for the reform of Chit Fund was to set up a 'Mutual Help Chit Fund' where the members of the larger-sized primary society envisaged would associate itself to a semi-co-operative association connected with the primary society for the purpose of being able to borrow individually when occasion arises from the aggregate contribution.¹

Other suggestions made include the following.²

- (a) The stakeholder of Chit Fund should be the primary society.
- (b) As regular contribution, a certain sum should be decided by the society.
- (c) All villagers should be made eligible for the membership of Chit Fund.
- (d) One-third of regular contribution should be treated as fixed interest bearing deposits kept in the society itself. After a fixed period, a member should be allowed to withdraw such deposits.
- (e) Another third should be used to build up 'needs fund'. Loans from this fund will have a limit. This limit may be different for different types of subscribers.
- (f) The last third of the fund collected by subscription could be disbursed in accordance with the prevailing practice of granting loans through a system of lottery.

¹ See, R.B.I. - A.I.R.C.S. vol.11 PP. 65 - 67, op.cit..

² Ibid. PP. 339 - 340.

The reforms suggested above seem to be quite useful, but unfortunately, until now, little has been done to transform the Chit Funds. At this point, we shall describe the nature and functions of the organized sector in agricultural finance.

2.10. 1 Structure of Organized Sector in Rural Finance:

The organised sector in the arena of rural finance consists of the following agencies:

- (a) The Commercial banks : b) The Reserve Bank of India (R.B.I.)
- (c) The State Bank of India : d) The co-operative Credit Societies
- (e) Land Mortgage banks and f) Loan Offices in Bengal.

Of these agencies, the discussion of the role of land mortgage banks is outside the scope of our analysis because here we are not discussing the capital market. So far as Loan Offices are concerned, it may be mentioned that these offices were mainly set up in Bengal for granting loans against mortgage, pledge of jewellery or even against personal security at rates varying between 12 per cent and 18 per cent against secured and 12 per cent to 56½ per cent or 112 per cent against unsecured loans.¹ Their total working capital was about Rs. 9 crores in 1929 and deposits were mobilized by paying higher interest rates. The importance of these loan offices are now in the wane in spite of some suggestions made for its improvement,² and hence no attempt will be made here to analyse their working.

It has already been shown (see table 2.2) that the organized sector contributed only 7.3 per cent of the aggregate borrowings of cultivators in 1951 - 2. In 1961 - 2 their total contribution was about 18 per cent only. It is in the context of this role, we shall proceed to describe the importance (or lack of it) of commercial banks in rural credit.

1 Government of India - The Indian Central Banking Enquiry Committee (1931), vol.1. Pt.1, PP.194 - 7, op cit.,

2 Government of India - Report of the Bengal Provincial Banking Enquiry Committee, vol.1. PP.214 - 220 op cit.,

2. 10. 2 Role of Commercial Banks:

In the history of agricultural credit in India, commercial banks have always played a very small role.¹ Thus, in 1951 - 2, commercial banks accounted for only 0.9 per cent of the total amount borrowed by the cultivators. In 1967-8, loans granted to agriculture as a proportion of total loans advanced was only about 2 per cent. It is possible to state several reasons to explain such minor role played by commercial banks. To mention a few:

a) The production period in agriculture is so long that commercial banks do not like to make advances to cultivators because such loans would have to be given by violating the liquidity principle of bank advances.

b) The types of securities that farmers in India could generally offer to the commercial banks are not suitable for advancing loans against. In most cases, the best collateral that cultivators can offer is land. But there is no good market for land transactions in India and laws are designed in such a way as to prevent land transfer. Further, there are many other problems with regard to title deeds and ownership. Thus even the best collateral, i.e. land, that the cultivators can offer may not be accepted always by commercial banks.

c) The prices of agricultural crops are subject to fluctuations, especially in a monsoon - type economy like India. In such cases, commercial banks, from the standpoint of profitability find very little incentive in granting credit against crops the value of which is subject to wide fluctuations and thereby courting the danger of capital loss.

¹ See, for example, a) R.B.I.- Financing of Agriculture by Commercial Banks, Bombay, 1969. b) R.B.I.- Organizational Framework for the Implementation of Social Objective, Bombay, 1969. c) R.B.I. - Report on Currency and Finance, 1967-68 and 1968-69. d) D.G.Karve, "Banking and the Rural Economy", R.B.I. Bulletin, December, 1967, PP. 1635-1641, e) R.B.I. Bulletin, December, 1968.

d) The uneconomic nature of a large number of agricultural holdings had reduced credit-worthiness of agriculturists and hindered commercial banks from making advances to cultivators.

However, commercial banks grant loans to agriculturists indirectly by giving credit to indigenous bankers and co-operatives. But here again, in 1951-2, less than 7 per cent of the working capital of State Co-operative banks consisted of loans taken from the commercial banks.¹ The indigenous banks mainly operate with their own funds and occasionally borrow from commercial banks.²

For quite some time there has been preoccupation with how commercial banks can play a greater role in agricultural finance. It is argued that commercial banks could make short-term advances for facilitating the movement and marketing of crops. In order to enable the commercial banks to do that, the scheme for marketing of crops could be improved by,

- " 1. the grading and standardization of staples and of contracts
- 2. proper storage facilities, and
- 3. creation of a properly regulated local as well as forward markets".³

1 R.B.I. - A.I.R.C.S., vol 11, P 323, op cit.,

2 See, for example, C.K.Johri - op cit., P.39.

3 R.B.I. Agricultural Credit Department - Statutory Report, Bombay, 1937, P.8.

It is observed that in extending commercial banking facilities in rural areas, it is important to see that for mobilising rural savings into productive investment via deposit-acceptance in the rural areas, the commercial banks should not compete with co-operative credit societies. Thus, it is argued: "If the storage and warehousing programme is effectively carried out and, further if that gives the needed stimulus to the proper grading of more important agricultural commodities, commercial banks will then for the first time be able to lend substantially on such commodities; and, also for the first time, they will have agricultural bills which will be negotiable and which the Reserve Bank can rediscount for them..."¹

Little progress was reported in the direction of commercial bank advances to agriculture up to 1967-8.² However, after nationalization of banks in 1969, the commercial banks have increased their lending to agriculture between 1969 and 1970,³ and this will be discussed later.

1 R.B.I. A.I.R.C.S. vol 11, P.484, op.cit.,

2 R.B.I. Report on Currency and Finance, 1968-69.

3 R.B.I. Annual Report, 1970, Bombay, 1970, PP.62 - 64.

2.10. 3 The Reserve Bank of India (R.B.I.) :

The R.B.I. took a keen interest in agricultural finance right from its inception.¹ But, despite its keenness, the R.B.I. Act imposed certain limitations on the degree of help that the R.B.I. could have rendered to the agriculturists.² These limitations were understandable in view of the R.B.I.'s limited indirect financing to agriculture via co-operatives and inability to grant sufficiently long-term credit.

However, the R.B.I. continued to try to play a larger role in the field of agricultural credit. Thus, in January, 1938, it formulated a scheme for providing finance for the marketing of agricultural produce through the money-lenders. Further, it tried to lay down a few rules for bringing the indigenous banker into the fold of organized banking system. But the attempts of the R.B.I. for the integration of dual rural money market were, by and large, unsuccessful mainly because the indigenous financial agencies could not accept these conditions. After 1947, the R.B.I. introduced some changes in the legislation so that it could have granted loans more liberally to co-operatives for a longer period and at concessional rates.³

1 R.B.I. - History of the Reserve Bank of India (1935-51) PP. 199-221 and PP. 467 - 492. op.cit.,

2 See, K.M.Patnaik - Monetary Policy and Economic Development in India, S. Chand & Co., New Delhi, n.d.1966? PP. 102 - 121. See also, K. Subba Rao, "Role of Reserve Bank in India in the Scheme of Agricultural Credit", R.B.I. Bulletin, August, 1947, PP. 485-92.

3 See, V. Sivaraman, "The Role of the Reserve Bank of India in the Scheme of Agricultural Credit", R.B.I. Bulletin, April, 1952 PP. 269-75.

Further, on the recommendations of the A.I.R.C.S., the R.B.I. started providing medium-term loans to State Co-operative banks from the National Agricultural Credit (Long-term operations) and the National Agricultural Credit (Stabilisation) Funds and long-term loans to Central land-mortgage banks from the National Agricultural (long-term operations) Fund. Again, the R.B.I. grants long-term loans to state governments for helping to subscribe to the share-capital of co-operative credit institutions.¹

The R.B.I. has surely tried to play an important role in rural finance. The role was inevitably indirect. We shall discuss later how far the R.B.I. departed from the orthodox principles of a central banker to promote integration of dual money market.

2. 10. 4 The State Bank of India: (S.B.I.)

Under the State Bank of India Act, the Imperial Bank of India was converted into the State Bank of India (S.B.I.) and started its work from 1st, July, 1955. It was mainly on the recommendation of the A.I.R.C.S. that the Imperial Bank was nationalized to lend more active support for the growth of co-operative credit, to spread rural credit facilities all over India, to offer financial and other types of facilities to co-operative marketing and processing societies.²

1 For details, see R.B.I. - The Reserve Bank of India - Functions and Working, Bombay, 1958. Also, R.B.I. - Report on Annual Currency and Finance. 1967-68, especially table S.44.

2 For detail, see, R.B.I. - Report of the All-India Rural Credit Review Committee, Bombay, 1969, PP.344 - 374.

The S.B.I. was permitted to continue the commercial banking functions of the Imperial Bank. However, it was desired that the S.B.I. would open at least 400 new branches within five years from the day of its opening. By helping to develop warehousing and marketing facilities, by discounting bills and hundis and by providing remittance facilities, the S.B.I. is expected to play a crucial role in rural credit. The expansion of the S.B.I. is impressive in terms of number of branches opened as well as in terms of granting rural credit indirectly. Nevertheless, perhaps its success is not as big as one might have expected. The role of the S.B.I. will, however, be more closely examined later.

2. 10.5. 1 Co-operative Credit Societies:

The origin of co-operative credit societies in India for playing an effective role in agricultural finance dates back to the year 1904 when the Act related to the development of co-operative credit societies was passed.¹ But before 1904, some experiments with co-operative societies were made in Bengal, Punjab and Uttar Pradesh. By 1912, the total working capital of the movement was less than Rs. 75 lakhs. To spread its growth more vigorously, a new act was passed in 1912 whereby recognition was given to the setting up of bodies like central banks and unions to finance and supervise the societies at the primary level. The Act also made provision for the registration of societies of various types for the economic welfare of its members.²

1 For detail, see Eleanor M. Hough - The Co-operative Movement in India, Fifth ed., Oxford University Press, Calcutta, 1966.

2 Government of India. The Indian Central Banking Enquiry Committee (1931), vol.1, Pt.1, PP. 111 - 153. op. cit.,

It is very disappointing to reflect that in 1951-2, co-operative credit accounts for only 3.1 per cent of the total borrowing of cultivators even after about 50 years of its existence.¹ This represent failure for the movement and in the next section, we shall try to analyse some of the major causes of failure.

2. 10. 5. 2 Causes for the failure of Co-operatives:

Several reasons may be advanced to explain the failure of co-operatives in India. As early as in 1931, it was observed: "The fundamental principle of true co-operation is lacking. Overdues were highly excessive. Audit is defective. Control is inefficient".² Further, "members of the society delay payments even when able to repay; understanding of the principles of co-operation and knowledge of essentials of rural credit are lacking; office-holders refrain from taking action against defaulters and the spirit of self-help is not prominent as it should be, if the movement is to be a live force in the village. Even where defects are obvious and admitted, there is reluctance, as dangerous as it is regrettable, to liquidate societies whose condition is beyond remedy".³ Other defects of co-operatives consisted mainly in their inelasticity, dilatoriness and inadequacy.⁴ The Central Banking Committee (1931) recommended, inter alia, the introduction of normal credit system whereby the society could fix the credit limit for each borrower in advance of the season and make arrangements for granting loans in due time.⁵

1 R.B.I. - A.I.R.C.S. Vol.11, P. 167, op.cit.,

2 Government of India - The Indian Central Banking Enquiry Committee. (1931), vol.1, Pt.1, PP. 132-4, op.cit.,

3 Ibid. P. 133.

4 Ibid. P. 136.

5 Ibid. P. 136.

Thus the Committee (1931) was in favour of loan supervision to make it more productive. Other defects of co-operatives are associated with lack of adequate personnel and training, lack of initiative and personal contact, illiteracy and ignorance of the borrowers and dishonesty of managing committees.

Other factors contributing to an explanation of the failure of co-operatives may also be mentioned.

(a) Competition from money-lenders and other indigenous financial agencies was stiff. Further, the mode of operation of indigenous financial agencies was much more elastic and quick than that of co-operatives.¹

(b) The co-operatives failed to satisfy, in anything other than a limited way, two basic needs: i.e., credit and marketing; thereby they were ineffective.²

(c) Lack of active sympathy towards the growth of co-operatives from organized financial institutions and even from co-operatives themselves.³

(d) Co-operative credit was largely granted to the large cultivators and sometimes on the basis of immovable properties which led to the sacrifice of the interest of small and medium peasants in particular and of co-operative principle in general.⁴

(e) Neglect of the needs of rural sector and bias towards the urban sector in getting credit.⁵

1 R.B.I. - A.I.R.C.S, vol.11. PP.258-9, op.cit.,

2 Ibid. P.260.

3 Ibid. P.263.

4 Ibid. PP 234-5.

5 Ibid. P.272.

(f) The " co-existence of three important facts, viz.,
 1) the organic connexion between credit, marketing and processing, V6
 2) the powerful urban derived competition arrayed against co-operatives
 in each of these spheres, and 3) the weak rural-based structure of
 co-operative credit "¹ explained partly the failure.

(g) The uneven competition between very weak, i.e., village and
 very strong, i.e., urban economy within a socio economic structure
 which is based on caste (at least in the village) where the upper
 layer of that structure is connected with an administration in the
 urban sector and where such connexion was largely the end-product
 of colonial rule and administration, commercialization of agriculture
 and urbanization of industry, spelt disaster to co-operative
 movement in India.²

Despite this failure up to 1951-2, some progress of
 co-operative credit movement can be noted by 1961-2 when
 co-operatives accounted for about 15.5 per cent of total borrowings
 of cultivators.³ This share may have gone up to probably 20 to 25
 per cent in 1967-8 or more.⁴ However, close examination will be
 made later of the workings of the credit co-operatives.⁵

1 Ibid. P.261

2 Ibid. PP. 278-9

3 See, R.B.I. Bulletin, September, 1965, P.1309.

4 See, R.B.I. Organizational Framework for the Implementation of
 Social Objective (1969) P. 578 op.cit.,

5 See, Ch.V.

2. 10. 6 Government Finance:

Government financing of agriculture was rendered possible during British rule by virtue of two laws:

- (1) The Land Improvement Loans Act, 1883.
- (2) The Agriculturists' Loans Act, 1884.

The first Act was passed to grant long-term loans and the second act was designed to grant short-term loans. Usually, loans were granted by the Government in times of famine and distress and such loans were treated as taccavi loans. Moreover, these loans had a role to play in giving credit to the backward areas and classes.

In 1951-2, it was revealed that taking India as a whole, government financed only 3.3 per cent of the total borrowings of the agriculturists.¹ Further, in actual practice, the inadequate loan that was granted was "ill-performed" by an "ill-suited agency". The chief defects in such loan operations were stated to be as following:²

- " (i) inadequacies of amount, inequality of distribution and inappropriateness of basis of security;
- (ii) inconvenience of timing, incidental delays and impositions of various kinds on the borrowers; and
- (iii) inefficiency of supervision and incompleteness of co-ordination".

¹ R.B.I. - A.I.R.C.S., Vol.11. P. 167. op cit.,

² Ibid. P. 199.

It may, however, be pointed out that there were some regional variations in credit granted by government. Thus, in 1951-2, government accounted for about 14.6 per cent of the total borrowings of cultivators in Punjab, whereas in Mysore, such proportion was only 0.2.¹ Such unevenness was observed also in 1961-2.²

In general, different departments of government finance had very little co-ordination among themselves, nor had they much contact with other agencies for rural finance.³

Such absence of co-ordination had naturally little impact towards promoting integration among the organized and unorganized agencies. We shall examine later the more recent efforts of the government.

2.10.7. The Postal Savings Bank:

The Postal Savings Bank is one of the chief organized agencies whereby it is feasible to mobilise rural savings into investment. Post-Offices are located in every corner of village India and they accept deposits from the people. However, not much attention is paid to the deposit - banking side of post-offices. A rise in deposit business could be useful in mobilizing rural savings.

1 Ibid. P.200.

2 See, RBI Bulletin, September, 1965. P.1357.

3 RBI - A.I.R.C.S. Vol.11. P.208, op.cit.,

Indeed, in India, the post-offices have the natural advantage of being located in most of the villages and in having familiarity with the local demand and supply sides of agricultural credit. Under these circumstances, the following recommendations have been made for the development of Post-Office Savings Banks.¹

(a) Greater interest should be taken by the officers in developing the deposit side of post-offices.

(b) When new post-offices are to be opened, due attention should be paid to the problem of mobilising rural savings.

(c) To make the scheme for deposit mobilisation more attractive to the people, regional language should be used as far as possible in printing rules, notices, etc.

(d) There is a genuine need to produce vigorous propaganda on the role and utility of such post-office savings banks.

(e) Whether the rules regarding opening of accounts, withdrawals etc, could be made more elastic or not should be examined in detail.

Post-Offices are generally well organized and enjoy the confidence of people. They have a net-work of branches throughout the country and could be developed without much operational cost. At present, interest rates offered by post-offices on savings are not high and as such rural savings may be mobilized by post-offices by the offer of higher deposit rates. It seems, therefore, that post-office savings banks, if properly developed, may play an important role for the promotion of integrated agricultural finance in India.

¹ Government of India - Report of the Rural Banking Enquiry Committee (1950), PP. 68 - 69, op.cit..

2. 11 Contact between the Organized and Unorganized Rural Money Markets and the problem of Integration:

From the present study of the nature and operations of the organized and unorganized money markets in the Indian rural economy, it emerges that one of the major problems of the Indian rural money market is the lack of integration between two different types of market. It is difficult to quantify precisely the degree to which the unorganized sector is dependent upon the organized sector. But it is believed that there is little nexus between dual money markets.¹

Some estimates of the degree of contact between the two markets could be made by measuring the extent to which commercial banks have financed directly and indirectly the agricultural sector. In 1967, only about 2 per cent of total loans given by commercial banks was diverted to agriculture and as such the bank may be regarded as weak.

Another criterion to estimate such links would be to measure commercial banks' lending to money-lenders. In 1951-2 only 4 per cent of the total village money-lenders obtained credit from the commercial banks.² Here again, the link between two sectors appeared to be weak. More recent information about the dependence of money-lenders on commercial banks or other types of organized financial agencies are not available.

1 U Tun Wai - op cit., I.M.F. Staff Papers, November, 1957, PP. 80-142

2 R.B.I. - A.I.R.C.S., vol. 1, Pt.2, PP. 672 - 673, op.cit.,

It may be argued that an estimate of the proportion of total institutional credit in total agricultural credit may indicate the links between two money markets. Such proportion was about 7 in 1951-2,¹ 18 in 1961-2,² and perhaps about 30 in 1967-8.³ This, perhaps, suggests a slowly growing link but this also implies that unorganized agencies have still a firm grip over the supply side of agricultural credit. There are, however, other ways of measuring the degree of contact between the organized and unorganized sectors and we shall examine these links and try to suggest some measures in our later discussion.⁴

1 R.B.I. - A.I.R.C.S. vol.11, P.167, op.cit.,

2 R.B.I.Bulletin, September, 1965, P. 1309.

3 See R.B.I. - Organizational Framework....(1969), P.578, op.cit.,

4 See Chapter V.

2.12. Conclusions:

The following conclusions may be drawn from the preliminary analysis of the supply side of agricultural credit:

(a) The Indian rural money market has a distinctly dual character as it is divided between the organized and unorganized sectors.

(b) The nature, composition and workings of the organized and unorganized financial agencies in the supply side demonstrate a good deal of contrast and complexity.

(c) The unorganized financial agencies - particularly the money-lenders - were fairly strong in the supply side and despite some advances of the organized agencies between 1951 and 1968, they still supply about 70 per cent of total rural credit. This clearly underlines the magnitude of the problem to be faced in any attempt to reduce their importance.

(d) There are some links between the organized and unorganized sections but these are quite weak. Here the main problem is one of strengthening the links between the two sectors to promote further integration. This we examine in detail below.

This description of the supply side will be followed by an analysis of the demand side of agricultural credit, and that leads naturally to the discussion of interest rates. In chapter III, the demand side of rural credit is examined and this is followed by an analysis of interest rate in rural areas in chapter IV.

CHAPTER III

BORROWING AND INDEBTEDNESS OF INDIAN CULTIVATORS:THE DEMAND SIDE3.1 INTRODUCTION

It is generally believed that one of the basic features of Indian agriculture is the deficit nature of the family budgets of a large number of cultivators. In 1962, it was revealed that 62.6 per cent of reporting households with income less than Rs. 1200.00 had no savings (see table A 3.1). A very "modest" saving income ratio of 2.7 per cent was observed for the income class Rs. 1201.00 - Rs. 1800.00 which accounted for about 19 per cent of total number of households.¹ This reflects the very low level of income of the peasants. The fact that about two-thirds of rural households had no savings manifested clearly excess of expenditure over income.

The deficit nature of agricultural family budgets may be explained by a variety of factors. They include low income per capita derived from small and scattered holdings, uneconomic use of land, absence of the availability of basic inputs, vagaries of weather and lack of education. As a result, Indian cultivators have to borrow whenever expenditure exceeds income. Evidence of such borrowing and indebtedness is abundant in periods both before and after independence.² In 1931, total rural indebtedness in India was about Rs. 900 crores in one estimate.³ But this was not very reliable

1 National Council of Applied Economic Research - All-India Rural Household Survey: Saving, Income and Investment, vol.II, New Delhi, 1965, PP. 96 - 100

2 See, for example, Government of India - The Indian Central Banking ... (1931). vol.I, pt.1, P.55, op.cit., Government of India - Report of Agricultural Finance... (1945), PP. 2 - 17, op.cit., Government of Madras - Report of the Economist... (1946), PP. 24 - 56, op.cit., Government of India - Report of the Rural Banking... (1950), PP. 36 - 39, op.cit., R.B.I. Bulletin, Sept. 1965, PP. 1296 - 1393.

3 Government of India - The Indian Central Banking... (1931), vol.I, pt.1. P.55, op.cit.

In 1961-2, cash loans outstanding for all rural households in India, stood at Rs. 2788.93 crores. Of this, Rs. 2380.00 crores (ie, 85.3 per cent) was outstanding against cultivators who formed roughly about 75 per cent of rural households.¹ The average amount outstanding per household and per reporting household was estimated as Rs. 406 and Rs. 647 respectively.² During 1961-2, out of total rural borrowings of Rs. 1238 crores, cultivators borrowed Rs. 1038 crores ie, 83.5 per cent and roughly 49 per cent of rural households reported borrowings at an average rate of Rs. 370 per reporting household and Rs. 180 per household.³ The proportion of debt outstanding per household in average tangible asset per household, was about 6 per cent.⁴

In this chapter, we shall try to analyse several factors influencing the borrowing and debt patterns of Indian cultivators. At the beginning, a reference will be made to the existing literature. Secondly, a statistical analysis will be made of borrowing and indebtedness according to purpose, security, duration, interest rate, sources, seasonality and asset-groups for the years 1951-2 and 1961-2. A further analysis for the year 1969-70 would have been desirable, but unfortunately, no systematic data are available after 1961-2. Finally, we shall try to test a few hypotheses to make some estimates of relative changes in the significance in some of the explanatory variables over two points of time.

1 R.B.I. Bulletin, September, 1965, P.1297.

2 Ibid. P. 1297.

3 Ibid. P. 1306.

4 R.B.I. Bulletin, June, 1965, P.839. Average tangible asset per household is said to be Rs. 6609.00.

3. 2. A Reference to the Literature:

Attempts have been made from time to time in India to analyse the composition, pattern and causes of borrowing by Indian cultivators.¹ It is obvious that the need to borrow is a reflection of the excess of expenditure over income. The causes of such excess expenditure have been considered in different Committee reports. In one report, such causes included illiteracy, low holdings, defective system of accounts kept by debtors and lack of the saving habit among the cultivators. It was also argued that the longer the interval between successive receipts of the return for labour, the greater would be the need to borrow.² The explanation was as follows: "If wages were paid monthly instead of weekly, only a very small proportion of the working class in the world could exist without credit; but the cultivator has to wait for half a year before he receives the return of his labour, and in far too large an area, where there is only one crop a year, the interval between successive receipts may be full twelve months".³ However, in the absence of reliable and adequate data, such a hypothesis cannot be tested.

In another report, attention has been drawn to such factors as poverty arising from soil condition, climate and irregular income, extravagance, growth of population, opportunities to borrow because of money-lenders' influence and revenue system of a fixed demand.⁴

1 This ch., fn.2, P.16.

2 Government of India - Royal Commission on Agriculture in India (1928) Abridged Report, Bombay, 1928, PP 431 - 444.

3 Ibid., P. 432.

4 See, Government of India - The Indian Central Banking....(1931) vol. 1, Pt. 1. PP 57 - 67, op.cit.,

It has been argued that in the past, the most important reasons for high debt were high interest rates and ancestral debt. The debt burden assumed greater proportion, also because of lack of distinction between short and long-term agricultural finance.¹ But, here again, little attempt was made to quantify the influence of the explanatory variables in both borrowing and debt patterns. Further, little information was available about the influence of explanatory variables in different regions to account for regional variations.

In 1945, on the basis of evidence provided by several Provincial Banking Committees (1931), the Agricultural Finance Sub.Committee (1945) observed that debt repayment was everywhere an important reason for contracting new debts. Debt was incurred also because of social expenditure, consumer needs, and distress circumstances while debt for capital expenditure was stated to be "insignificant".² The Committee (1945) was right in stating that debt burden depended upon the time at which the survey was conducted. Such burden may be very low at the end of a successful harvest. This element of seasonality in the pattern of rural borrowing calls for closer examination.³ Further, borrowing may be affected by the nature of the economy. In a subsistence economy, and where intensive agricultural operations are low, borrowing may also be low both in aggregate and per capita terms whereas in a commercialized economy and where agricultural operations are fairly intensive, borrowing may be relatively high. Again, the pattern of borrowing may be different among different classes of cultivators. The physical features of agricultural area may sometimes determine the level of economic activity and this may affect capital expenditure and the level of borrowing.⁴

1. Ibid. P.60. 2. Government of India - Report of the Agricultural Finance Sub-Committee(1945), PP 2 - 17, op.cit.,

3. Ibid. P.12. 4. Ibid. P.13.

However, it must not be assumed that the absence of borrowing, in itself, is a healthy sign because, "freedom from debt might be as much a sign of lack of credit as of financial strength".¹ In India, the main causes of borrowing are stated to be associated with physical resources and social environment.² Poverty was regarded as the result of fluctuations in agricultural prices, system of land tenure and pressure of population.³

Such points are no doubt relevant but it is very difficult to examine the separate effects of each one of these factors in the absence of suitable data. The Finance Sub-Committee (1945) reached the conclusion that to cater for all types of rural credit, Agricultural Credit Corporations (A.C.C.) should be set up in each province to deal with short and long-term loan applications of any individual agricultural producer. But it was not clear from the report how if, the A.C.C. were established, the relationship between the A.C.C. and co-operatives would grow. Moreover, the A.C.C. may face the same difficulties which the co-operatives had to encounter for many years. However, of late, it has been decided by the Government that an A.C.C. will be set up in those states where the co-operatives could not progress satisfactorily.⁴ We shall turn to a closer examination of their role later.

1 Ibid. P.13.

2 Ibid. P.15.

3 Ibid. PP.15-16.

4 For details, see, R.B.I. - Report of the All-India Rural Credit Review Committee, (R.A.I.R.C.R.), Bombay, 1969, PP. 644 - 662.

Some quantitative estimates of rural indebtedness in Madras province in 1946, are however, available in Naidu's report.¹ Causes of rural indebtedness were classified as (a) "basic" and (b) "alterable". Basic reasons include the nature of the economy like weather, soil conditions and size of land-holdings; the 'alterable' reasons include factors like low price, very high rate of interest, natural growth of population, litigation, etc. It was, however, argued that war-time debt was influenced by easy money conditions, high prices, enactment of debt relief legislations, sale of land and supplementary income due to war-time causes.²

Naidu tried to estimate the effects of land sales on debt liquidation and then argued that the rest of the total amount of debt that was liquidated between 1939 and 1945 was entirely due to a war-time rise in prices. The statistical estimates of correlation between price rise and debt fall and the standard errors of such correlation ^{are not given.} However, in fairness to Naidu, it may be said that in Naidu's time, very little use of statistical tools was made to analyse Indian economic problems.

Naidu's study had certain other interesting aspects. For example, data on per family and per capita debt showed that tenants and landless labourers incurred a greater volume of debt and there was a worsening of their economic status. But Naidu's conclusion about the falling total rural indebtedness was valid for Madras state alone and could not be generalized for the whole of India.

1 See, Government of Madras - Report of the Economist...(1946)
op.cit.,

2 Ibid. P. 51.

On the basis of per capita debt calculated by Naidu, Rangnekar estimated that the volume of indebtedness of Indian cultivators was roughly equal to Rs. 1100 crores in 1945.¹ After examining other regional studies, Rangnekar concluded that so far as indebtedness is concerned, the economic condition of the cultivator might have been improved in 1942-3, but since then, the situation had deteriorated at least for 90 per cent of the agricultural population consisting of uneconomic holders, landless tenants and labourers. It may be pointed out that Rangnekar's method of estimation of total all-India debt from Naidu's calculation of per capita debt in the province of Madras does not seem to be very appropriate. Moreover, Rangnekar's study did not throw any new light on the problem as his conclusion was just the same as Naidu's observation.

After independence in 1950, conclusions similar to those drawn by Naidu and Rangnekar were also observed in another report.² It is argued that as the terms of trade moved in favour of agriculture, there was a rise in money income and savings and fall in indebtedness in the rural sector. It is, however, conceded that a large majority of the rural population might not have gained at all.

1 See, D.K.Rangnekar - Agricultural Finance in India. Co-operators Book Depot, Bombay, 1952, PP. 74-5.

2 Government of India - Report of the Rural Banking...(1950) P.39, op cit.,

What is interesting in this report (1950) is the ease with which the conclusion about "general improvement" of the condition of agriculturists has been reached. For one thing, it is not clear what sort of data were used for arriving at the conclusion about reduction in indebtedness. For another, it is never stated which class of cultivators stood to gain when the "terms of exchange" was favourable to agriculturists. In fact, the question of distribution of gains among the different classes of Indian cultivators has seldom been discussed in Indian economic literature.

Most of the studies mentioned so far have been made at the all-India level. Studies at the micro level (ie. village) have also been made. In one such study in a South India village, Harper broadly confirmed that the more general and common causes of borrowing are also witnessed at the village level.¹ Such causes include low income and repayment emanating from small and uneconomic land holdings, mismanagement of family property, expenditure on capital investment, livestock and ceremonies. Such reasons are, no doubt, important in explaining borrowing by cultivators but in the absence of suitable data, little opportunity is given to test the relative importance of the different variables, mentioned by Harper.

1 See, E.B.Harper, "Moneylending in the Village Economy of Malnad", "The Economic Weekly" Annual No., February 4, 1961 PP.169 - 177.

3.3 Method, Scope and Sources of present Study:

The method that we propose to follow in our present study for analysing the borrowing and indebtedness of cultivators is to apply simple and multiple OLS¹ regression equations to available data to quantify our results as far as possible. Here we shall try to note the econometric problems involved in our analysis. It may, however, be mentioned that this type of quantitative study has not been made before in analysing Indian agricultural credit problems and in this respect, our study may be regarded as different from others. The scope of the present enquiry will, however, be limited to only two periods ie, 1951-2 and 1961-2. The choice of these two periods is dictated by the nature and availability of data. However, we shall try to note the changes in relative significance of the explanatory variables that we shall introduce in our system of equations between 1951 and 1962.

The sources of data used in our analysis are mainly the following:

- (a) R.B.I.- All-India Rural Credit Survey, vols. 1, 11, 111, (1951-2) ie, A.I.R.C.S.
- (b) R.B.I.- Rural Credit Follow-up Surveys: 1956-60.
- (c) R.B.I.- "All India Rural Debt and Investment Survey", 1961-2" published in R.B.I. Bulletin, September, 1965.

All these surveys were conducted by the R.B.I. and in data available in these surveys, borrowing and indebtedness of cultivators were classified according to sources, purposes, security, rate of interest, duration etc. and therefore, such data are amenable to statistical analysis.

1 OLS means ordinary least square.

It may, however, be mentioned that the Follow-up Surveys from 1956 to 1960 were generally made only for a certain limited number of districts and thus, strictly, comparisons with original surveys with data taken from Follow-up Surveys have their limitations. Nevertheless, data available in the Follow-up Surveys will only be used when adequate data in the comparable year are not available from other sources. It is unfortunate that no recent information about borrowing and indebtedness is available because comparisons with data available for recent times would have made our analysis more interesting. This gap in empirical field requires careful consideration. It is also important to remember that the statistical estimates have to be interpreted with due caution.

3. 4. 1 Factors affecting borrowing and indebtedness:
1951-2 and 1961-2:

In this section, an attempt will be made to analyse changes in the significance of different variables affecting borrowing and indebtedness in both 1951-2 and 1961-2. The results obtained for the year 1951-2 are summarised in the next section.

3. 4. 2 Estimates for 1951-2:

The estimates of the co-efficients of different purposes affecting borrowing in 1951-2 are set out in the following equation:¹
(See table A 3.2)

$$B = 26.3429 + .8015 F A + 1.2190 C A + .9089 cv + 1.0426 N \dots (1)$$

(.1229) (.1328) (.2130) (.2506)

$$D.W. = 1.98$$

$$R^2 = .894$$

$$D.F = 50$$

1 Data are taken from R.B.I. A.I.R.C.S. vol.111, PP. 294-308, op.cit.,

Estimates of the equation for debt for the same year is set out in equation (2)¹: (See table A3.3).

$$D = 1.2534 + 1.5710 \text{ FA} + .8781 \text{ CA} + .9702 \text{ cv} + .8655 \text{ N} \dots (2)$$

(.1574) (.2254) (.3659) (1.0773)

Where

D.W. = 2.51

$R^2 = .928$
D.F. = 23

B = Total borrowing.

D = Total loans outstanding.

FA = Family Expenditure.

CA = Capital Expenditure.

CV = Current Expenditure.

N = Non-farm business Expenditure.

Figures in parentheses show the standard errors.

Here we obtain a fairly good fit for both equations (1) and (2). However, in equation (2) estimate of the co-efficient of N seem to be insignificant.

When variables were introduced according to their significance it appeared that CA was the most significant variable affecting borrowing and this is shown in equation (1.1) :

$$B = 91.2493 + 1.9480 \text{ CA} \dots (1.1)$$

(.1796)

D.W. = 1.95

$R^2 = .689$
D.F. = 53
F. = 117.60

Capital expenditure, here, appears to explain about 69% of total variation and the result obtained seems to be very important because it refutes the widely believed hypothesis that family expenditure is the most significant variable that affects borrowing.

¹ For data, See, R.B.I.- A.I.R.C.S., vol.111, PP. 622-3, op.cit.,

However, in the case of indebtedness, family expenditure became the most significant variable as it alone explained 77% of the variation of total loans outstanding. This is shown in equation(2.1):

$$D = 33.0970 + 2.0963 \text{ FA} \dots (2.1) \quad R^2 = .766$$

$$(.2273) \quad \text{D.F.} = 26$$

$$F. = 85.03$$

In equation (1.2), it is revealed that FA coupled with CA explained about 80% of the borrowing and FA was relatively the second most significant variable affecting borrowing:

$$B = 37.3342 + .8714 \text{ FA} + 1.4778 \text{ CA} \dots (1.2)$$

$$(.1657) \quad (.1716) \quad R^2 = .797$$

$$\text{D.F.} = 52$$

Just the opposite happens in the case of indebtedness as CA comes after FA as the relatively second most significant variable to affect indebtedness. This is evinced in equation (2.2) :

$$D = 6.5920 + 1.6317 \text{ FA} + 1.2210 \text{ CA} \dots (2.2) \quad R^2 = .900$$

$$(.1719) \quad (.2116) \quad \text{D.F.} = 25$$

It appears that together with CA, FA explained about 90% of total variation in indebtedness. The introduction of cv, which came next in the order of significance, yielded (2.3):

$$D = 3.5130 + 1.5488 \text{ FA} + .9412 \text{ CA} + 1.0285 \text{ cv} \dots (2.3)$$

$$(.1538) \quad (.2097) \quad (.3559) \quad R^2 = .926.$$

$$\text{D.F.} = 24.$$

Little multicollinearity was observed between the major explanatory variables like FA and CA and hence our estimates appear to be unbiased.

3.4. 3 Estimates for 1961-2:

The estimates obtained in section 3.4.2 may be compared now with estimates made for the year 1961-2¹. We have,

$$B = -0.2976 + 1.1715 \text{ FA} + .8598 \text{ CA} + .9695 \text{ cv} + 2.3876 \text{ R} \dots (3)$$

(.3308) (.1493) (.1120) (.7886)

$$\begin{aligned} D.W. &= 2.43 & R^2 &= .993 \\ & & D.F. &= 10 \end{aligned}$$

$$D = -0.6718 + 1.0856 \text{ FA} + 1.1341 \text{ CA} + 0.9999 \text{ cv} + 1.3757 \text{ R} \dots (4)$$

(.0399) (.1160) (.1452) (.4419)

$$\begin{aligned} \text{Where} & & D.W. &= 2.37 & R^2 &= .998 \\ \text{R} = \text{Debt repayment.} & & & & D.F. &= 10 \end{aligned}$$

Equations (3) and (4) appear to be a good fit. It should be mentioned that for the year 1961-2, in the list of explanatory variables, repayment of debt has been included instead of non-farm business expenditure. Such replacement was due to the nature of data available.

Contrary to the existing belief, CA became the most significant variable affecting both borrowing and loans outstanding as evinced in equations (3.1) and (4.1):

$$\begin{aligned} B &= 16.5581 + 3.4253 \text{ CA} \dots (3.1) & R^2 &= .907 \\ & & D.F. &= 13 \\ & & F &= 127.47 \\ & & D.W. &= 2.15: \\ D &= 45.3073 + 2.6475 \text{ CA} \dots (4.1) & R^2 &= .810 \\ & & D.F. &= 13 \\ & & F &= 55.46 \\ & & D.W. &= 2.07 \end{aligned}$$

Thus, in 1961-2, the hypothesis that borrowing and debt were influenced most significantly by household expenditure cannot be accepted on the basis of present study.

1 For data, see, R.B.I. Bulletin, September, 1965, PP. 1329-1331 and PP. 1363 - 1365.
See also tables A 3.4 and A 3.5

Together with FA, CA accounted for about 96% of total variation of borrowing and 98% of indebtedness as shown in equation (3.2) and (4.2):

$$B = 5.0471 + 2.1308 \text{ CA} + .9794 \text{ FA} \dots (3.2) \quad R^2 = .964$$

$$(.3563) \quad (.2249) \quad \text{D.F.} = 12$$

$$D = 5.6631 + 1.6920 \text{ CA} + 1.0371 \text{ FA} \dots (4.2) \quad R^2 = .987$$

$$(.1213) \quad (.0804) \quad \text{D.F.} = 12$$

It should be mentioned that our estimates for the equation for borrowing are not wholly unbiased as multicollinearity was observed between CA and FA.

Therefore, our conclusion on borrowing should be accepted with caution. On the other hand, little multicollinearity has been observed between CA and FA when loans outstandings were analysed and thus, in that case, our conclusion need not be substantially vitiated.

In the estimates of the equation for loans outstanding, current expenditure (ie. cv) came next in the order of significance and along with CA and FA, it explained 99% of total variation as shown in equation (4.3):

$$D = - 0.9680 + 1.4201 \text{ CA} + 0.7994 \text{ cv} + 1.1116 \text{ FA} \dots (4.3)$$

$$(.0949) \quad (.1741) \quad (.0518)$$

$$R^2 = .996$$

$$\text{D.F.} = 11$$

3. 4. 4. Conclusions:

The following conclusions may be reached on the basis of the analysis made in previous sections:

(a) The main explanatory variables of borrowings and loans outstanding appeared to be capital and family expenditure for both 1951-2 and 1961-2.

(b) The widely believed hypothesis that cultivators borrow and remain indebted mainly for incurring large family expenditure has not been substantiated on the basis of our observation. Indeed, it appeared that in most cases it was capital and not family expenditure which was the most significant variable affecting the demand side.

(c) From (b) it follows that the hypothesis that there was some change from indebtedness for consumption to indebtedness for incurring capital expenditure between 1951-2 and 1961-2, and therefore, to some extent, to indebtedness for production has not been rejected in our findings. It may, however, be mentioned in support of our conclusion that using the R.B.I. Follow-up data for 1959-60, Dr. Tara Shukla also found "more intimate relation between investment and borrowings or debt than between family expenditure and borrowings or debt".¹ This may imply that districts or states borrowing greater amount or having larger debts also invest more for productive purposes, because of greater "technical potentiality for investment and hence less uncertainty of repayment".² This has also the important implication both at the district and the state level that at a higher level of borrowing, capital expenditure rather than family expenditure is more closely correlated with borrowing and/or debt and perhaps at a lower level of borrowing and/or debt family expenditure is more closely correlated with indebtedness.

¹ See, Tara Shukla - Capital Formation in Indian Agriculture, Vora & Co. Publishers Private Ltd., Bombay, 1965. P. 167. ² Ibid. P. 167.

3. 5. 1 Borrowing and Indebtedness according to Sources:

The study of borrowing and indebtedness according to sources may be important for many reasons. Firstly, it helps us to specify different sources of credit. Secondly, a quantitative study enables us to evaluate the relative significance of different sources in the supply side. Thirdly, the study may be useful in identifying the changes in the significance of organized and unorganized sectors in the supply side of rural credit.

3.5. 2 Estimates for 1951-2.

The stastititcal estimates of the co-efficients of supply agencies affecting borrowing and debt are stated in equations (5.1) and (6.1):¹(See tables A 3.3 and A 3.6)

$$B = 47.2729 + 2.1866 CO + .8630 RL + .9708 AL + .8420 PL \dots (5.1)$$

(1.4958) (.5218) (.1879) (.2055)

$$D.W. = 1.15 \quad R^2 = .822$$

$$D.F. = 8$$

$$D = 22.3641 + 2.6383 CO + .8056 RL + 1.0795 AL + 1.0105 PL \dots (6.1)$$

(.5826) (.1984) (.0716) (.2122)

$$D.W. = 1.91 \quad R^2 = .945$$

$$D.F. = 21$$

Where CO = Co-operatives

RL = Relatives

AL = Agricultural Money-lenders

PL = Professional Money-lenders

1 For Sources of data, see, R.B.I. - A.I.R.C.S. vol.1, Pt.2, P.27 op.cit., and R.B.I. - A.I.R.C.S. vol.111, PP, 622-3, op.cit.,

While equation (6.1) seems to be fairly good fit, in equation (5.1), high standard errors of the co-efficients of CO and RL make their significance rather weak.

Agricultural money-lenders seemed to be the most significant variable affecting the supply side as it alone explained about 41% of total variation in borrowings and 75% of total debt as evinced in equations (5.1) and (6.1):

$B = 182,6362 + .7266 \text{ AL} \dots(5.1)$	$R^2 = .416$
$(.2595)$	$\text{D.F.} = 11$
	$F = 7.84$
$D = 103.6084 + 1.1717 \text{ AL} \dots(6.1)$	$R^2 = .756$
$(.1359)$	$\text{D.F.} = 24$
	$F = 74.35$

Together with professional money-lenders, agricultural money-lenders explained about 70% of total variation in borrowings. In case of indebtedness, co-operatives came next to agricultural money-lenders and together they explained about 83% of total variation. These are shown in equations (5.2) and (6.2):

$B = 109.8258 + .8717 \text{ AL} + .6899 \text{ PL} \dots(5.2)$	$R^2 = .697$
$(.2018) \quad (.2266)$	$\text{D.F.} = 10$
$D = 76.7134 + 3.2010 \text{ CO} + 1.1141 \text{ AL} \dots(6.2)$	$R^2 = .838$
$(.9339) \quad (.1141)$	$\text{D.F.} = 23$

Relatives followed the professional money-lenders in the order of significance in the side of borrowings and professional money-lenders followed the co-operatives in the side of debt as shown in equations (5.3) and (6.3):

$B = 60.2920 + 1.0022 \text{ AL} + .8057 \text{ PL} + .9631 \text{ RL} \dots(5.3)$	$R^2 = .774$
$(.1981) \quad (.2165) \quad (.5490)$	$\text{D.F.} = 9$
$D = 44.3361 + 1.0464 \text{ AL} + 3.1055 \text{ CO} + 1.0406 \text{ PL} \dots(6.3)$	$R^2 = .902$
$(.0929) \quad (.2455) \quad (.2768)$	$\text{D.F.} = 22$

The relatively high standard error for the co-efficient of RL in (5.3) makes its estimate rather biased. However, our estimates have revealed the stronghold of money-lenders in the supply side.

3. 5. 3

Estimates for 1961-2:

The relative significance of the agencies affecting the supply side in 1961-2 is shown in equations (7) and (8):¹

$$B = 7.2136 + .2492 CO + 3.2727 RL + 1.0955 AL + 1.3231 PL \dots (7)$$

$$(.2674) \quad (.7037) \quad (.1711) \quad (.3617)$$

$$D.W. = 2.08. \quad R^2 = .962$$

$$D.F. = 10$$

$$D = 8.6922 + 1.4973 CO + 1.8342 RL + 1.0383 AL + 1.2948 PL \dots (8)$$

$$(.2541) \quad (.4918) \quad (.0465) \quad (.1315)$$

$$R^2 = .991$$

$$D.W. = 2.93. \quad D.F. = 10$$

Equations (7) and (8) seem to be good fit. However, in (7) the significance of CO seems to be very low. Once again, agricultural money-lenders appeared to be the most significant source in the supply side explaining about 65% of the total variation of borrowings and 79% of total debt as shown in equations (7.1) and (8.1):

$$B = 33.0509 + 1.4865 AL \dots (7.1)$$

$$(.3007)$$

$$R^2 = .653$$

$$D.F. = 13$$

$$F = 24.53$$

$$D = 63.4447 + 1.2594 AL \dots (8.1)$$

$$(.1782)$$

$$R^2 = .793$$

$$D.F. = 13$$

$$F = 49.95$$

In the debt side, the professional money-lenders and in the borrowing side, the relatives came next to agricultural money-lenders in order of significance as shown in equations (7.2) and (8.2):

$$B = 7.0346 + 1.4491 AL + 4.4487 RL \dots (7.2)$$

$$(.1594) \quad (.7593)$$

$$R^2 = .910$$

$$D.F. = 12$$

$$D = 43.1402 + 1.0942 AL + 1.3988 PL \dots (8.2)$$

$$(.1370) \quad (.3910)$$

$$R^2 = .900$$

$$D.F. = 12$$

¹ For data, see, R.B.I. Bulletin, September, 1965, PP. 1323 - 4 and PP. 1357 - 8, See, also, tables A.3.4 and A 3.5.

Professional money-lenders came next to relatives in order of significance in the case of borrowing and co-operatives came next to professional money-lenders in the side of indebtedness. This is evinced in equations (7.3) and (8.3):

$$\begin{array}{rcl}
 B = 7.0628 + 1.1935 \text{ AL} + 3.6293 \text{ RL} + 1.2192 \text{ PL} \dots (7.3) \\
 \quad \quad \quad (.1342) \quad \quad \quad (.5871) \quad \quad \quad (.3421) \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad R^2 = .958 \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{D.F} = 11 \\
 D = 18.8227 + .9982 \text{ AL} + 1.3773 \text{ PL} + 2.0241 \text{ CO} \dots (8.3) \\
 \quad \quad \quad (.0667) \quad \quad \quad (.1856) \quad \quad \quad (.3113) \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad R^2 = .979 \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{D.F} = 11
 \end{array}$$

3.5. 4 Conclusions:

The following conclusions may be reached on the basis of our present study.

(a) In both 1951-2 and 1961-2, agricultural money-lenders remained the most important source of credit to the cultivators in the supply side.

(b) The relative significance of the role of professional money-lenders went down considerably in 1961-2 in comparison with 1951-2 and this conclusion is in line with the findings of the R.B.I. survey.

(c) Relatives seem to have gained in importance in 1961-2 in comparison with 1951-2 in the side of borrowing.¹

(d) The importance of the co-operatives did not appear to be great in the supply side in either 1951-2 or 1961-2.

(e) The supply side of rural credit was dominated by the unorganized sector in both 1951-2 and 1961-2 and little change, if any, was noted in this respect in the periods of our study.

1 *Only interest-free loans given by relatives were treated as loans from relatives; loans bearing interest from a relative were classified as from one or the other of the appropriate agency such as the agriculturist money-lenders, professional money-lender, etc., according to the business of the relative". See, R.B.I. A.I.R.C.S. vol.1.Pt.2, P.1. op.cit.,

3. 6. 1 Borrowing and indebtedness according to security: 1951-2 and 1961-2:

In this section, we shall try to evaluate the significance of different types of securities against which loans were borrowed or outstanding. As we have done before, we shall confine our analysis to only two periods, ie, 1951-2 and 1961-2;

3. 6. 2 Estimates for 1951-2:

The estimates made for the year 1951-2 have been stated in equations (9) and (10):¹ (see tables A 3.7 and A 3.8):

$$B = 6.0185 + 1.0140 PS + .7713 BU + .9900 IP \dots (9) \quad R^2 = .992$$

$$\quad \quad \quad (.0196) \quad \quad (.3263) \quad \quad (.0643) \quad \quad D.F. = 34$$

$$\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad D.W. = 2.25$$

$$D = -4.5979 + 1.0275 PS + 2.0397 BU + .9929 IP \dots (10)$$

$$\quad \quad \quad (.0212) \quad \quad (.2928) \quad \quad (.0351) \quad \quad R^2 = .996$$

$$\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad D.F. = 23$$

$$\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad D.W. = 1.97$$

Where

PS = personal security:²

BU = Bullion and Ornaments:

IP = Immovable property:

D = Cash loan outstanding for more than one year.

Personal security alone explained 92% of the total variation in borrowing and 84% of total debt as shown in (9.1) and (10.1):

$$B = 14.6159 + 1.1330 PS \dots (9.1) \quad R^2 = .926$$

$$\quad \quad \quad (.0533) \quad \quad \quad D.F. = 36$$

$$\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad F. = 452.06$$

$$D = 31.7685 + 1.2915 PS \dots (10.1) \quad R^2 = .843$$

$$\quad \quad \quad (.1115) \quad \quad \quad D.F. = 25$$

$$\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad F. = 134.19$$

1 For data, see, R.B.I.- A.I.R.C.S., vol 111, PP. 595-6 and PP. 640-1, op cit.,

2 These are unsecured loans, generally given against personal guarantee.

Immovable property came next to personal security as the second most significant explanatory variable and together they explained 99% of total variations in borrowings and 98% of debt. This is shown in equations (9.2) and 10.2):

$$B = 10.7817 + 1.0113 \text{ PS} + 1.0281 \text{ IP} \dots (9.2) \quad R^2 = .991$$

(.0208) (.0662) D.F. = 35

$$D = 7.4061 + 1.0395 \text{ PS} + 0.9824 \text{ IP} \dots (10.2) \quad R^2 = .987$$

(.0364) (.0606) D.F. = 24

The explanatory variables here appeared to be free from multicollinearity and auto-correlation and the estimates appear to be unbiased.

3. 6. 3 Estimates for 1961-2:

The results obtained for the year 1961-2 are summarised in equations (11) and (12):¹(see table A 3.9)

$$B = 12.0495 + .9277 \text{ PS} + 1.1366 \text{ IP} + .8774 \text{ SU} - .3340 \text{ BU} \dots (11)$$

(.1894) (1.0242) (.8133) (3.9674)

$$\text{D.W.} = 1.87. \quad R^2 = .932$$

D.F. = 7

$$D = 10.5043 + 1.0072 \text{ PS} + 1.0110 \text{ IP} + .5256 \text{ SU} + .4985 \text{ BU} \dots (12)$$

(.0760) (.1434) (.7250) (2.2220)

Where D.W. = 1.98. R² = .982

D.F. = 9

SU = Guarantee by third party on surety security.

In equations (11) and (12), estimates of both SU and BU appear to be biased and insignificant and this was also true to the estimate of IP in (11). Personal security explained alone 89% of total variation of borrowing and 88% of total debt as shown in equations (11.1) and (12.1):

$$B = 13.7421 + 1.1042 \text{ PS} \dots (11.1) \quad R^2 = .896$$

(.1187) D.F. = 10

$$D = 33.6162 + 1.1507 \text{ PS} \dots (12.1) \quad R^2 = .881$$

(.1222) D.F. = 12

F = 88.72

1 For data, see, R.B.I. Bulletin, September, 1965, PP 1338-1340 and PP 1372-1374.

Immovable property came next to personal security in the order of significance and together they explained about 98% of total variation of debt as shown in (12.2):

$$D = 10.4576 + 1.0356 \text{ PS} + 9995 \text{ IP} \dots (12.2) \quad R^2 = .981$$

$$(.0527) \quad (.1318) \quad \text{D.F.} = 11$$

3. 6. 4 Conclusions:

The following conclusions may be drawn on the basis of our study made in sections 3.6.1 to 3.6.3 :

(a) Personal security was by far the most important form of security against which loans were either borrowed or outstanding in both 1951-2 and 1961-2.

(b) In both periods of our study, little change has taken place in the forms of security offered by the cultivators to get loans. This underlines the problem of developing different types of securities against which loans may be granted. The existence of such a problem emphasizes simply the limitations faced by organized agencies in granting credit to the farmers. On the other hand, it strengthens the hand of unorganized agencies in Indian rural money market, particularly those of money-lenders, who did not hesitate to advance loans against personal security. Thus, the problem is one of developing suitable types of securities which would be acceptable by the organized agencies. If the process of developing securities takes a long time, then the organized agencies like co-operatives and commercial banks must devise such measures which would take into account the farmers' ability and skill to produce, earn and repay rather than their static income and assets.

(c) It follows from (b) that attempts to expand credit flows by organized agencies in rural areas may involve departure from the traditional principles of institutional financing and perhaps such institutional agencies may have to formulate an "anticipated income theory of liquidity" instead of strictly adhering to the orthodox canons of banking like liquidity and profitability.

3.7. 1 Relationship between borrowing, indebtedness and asset-groups:

After considering the classification of borrowing and indebtedness according to different types of security, it may be interesting to examine how loans were granted by the co-operatives as well as at all-India level to different types of cultivators belonging to different asset-groups. It is generally argued that in India, distribution of credit is unfavourable to poor farmers.

In this section, we shall try to test the validity of this hypothesis. Unfortunately, data on credit distribution according to asset-groups are not adequate in 1951-2 to make a comparative estimate between 1951-2 and 1961-2 possible and thus our estimate will be made for only one period, ie, 1961-2.

3. 7. 2 Borrowings from Co-operatives according to asset-groups:

The total amount borrowed from cultivators from co-operatives in the Survey year (1961-2) stood at Rs. 160.5 crores and this was 93.6% of total borrowings of all rural households from co-operatives.¹ The proportion of borrowings from co-operatives to total borrowing rose from 3.9% for the lowest asset-group to 20.5% for the highest asset-group. Thus, a relatively higher proportion of borrowing was observed among that section of cultivators who belonged to higher asset-groups. The average borrowing per reporting household rose from Rs. 103.0 to Rs. 899.0 for the highest asset-group.²

1 Cultivators form about 4/5ths of total rural households.

2 See, R.B.I. Bulletin, September, 1965, PP. 1311-1312.

It is observed that the rural households in the asset-groups of Rs.20,000 and above, who formed about 5% of all the rural households, accounted for about 1/3rd of the aggregate borrowings from co-operatives, while the households in the two lowest asset-groups, forming 30% of all rural households had a share of only 3.5% in the total amount advanced by co-operatives in 1961-2.¹ We shall now note whether the same pattern of borrowing is observed at all-India level.

3. 7. 3 Borrowings according to asset-groups: All-India: 1961/2.

The share of each asset-group in total cash borrowings at the all-India level roughly shows the same pattern that we have considered in the earlier section. The lowest asset-group accounted for only 1.4% of total borrowings whereas the highest asset-group accounted for 23%. The top two asset-groups together accounted for 43.2% of total borrowings. This implies that credit distribution both at the all-India level as well as from co-operatives, was in favour of those cultivators who belonged to the higher asset-groups. In the following section, we shall try to make some statistical estimates of borrowings and debt in different asset-groups at all-India level.

1 Ibid. PP. 1311-1312

3. 7. 4 Statistical Estimates of borrowing and debt according to asset-groups: 1961-2:

The application of simple linear regression to all-India data yielded equations (13) and (14)¹ (see Table A 3.10)

$B = 116.7872 + .0410 A \dots(13)$	$\bar{R}^2 = .9964$
$(.0010)$	D.F. = 5
$t = 40.82$	D.W. = 2.0791
$D = 182.1823 + .0818 A \dots(14)$	$\bar{R}^2 = .9889$
$(.0035)$	D.F. = 5
$t = 23.13$	D.W. = 2.2972

Where B = Average borrowing per reporting household
 D = Average loans outstanding per reporting household.
 A = Asset-groups.

Equations (13) and (14) show clearly that the relationship between borrowing/debt and asset-groups is positive and highly significant given the t-values. The equations also appear to be free from auto-correlation given D.W. statistic.

The regression analysis for borrowings from and indebtedness to co-operatives and asset groups yielded equations (15) and (16):²

$B_c = 119.1253 + .0409 A \dots(15)$	$\bar{R}^2 = .9961$
$(.0010)$	D.F. = 5
$t = 39.09$	D.W. = 1.9946
$D_c = -27.8074 + 2.4480 \dots(16)$	$\bar{R}^2 = .9966$
$(.0581)$	D.F. = 5
$t = 42.14$	D.W. = 1.9860

Where B_c = Borrowings from co-operatives and
 D_c = Indebtedness to Co-operatives.

Equations(15) and (16) suggest that the relationship between asset-groups and borrowings and indebtedness to co-operatives is positive and statistically highly significant.

1 For data, see, R.B.I.Bulletin, September, 1965, P.1306 and PP. 1296 - 1297.

2 Ibid, P.1301 and P.1311.

3.7. 5. Conclusions:

It is possible to draw the following conclusions on the basis of our study on the relationship between borrowings/ indebtedness and asset-groups:

(1) The correlation between borrowing, indebtedness and asset-groups is positive and statistically highly significant at the all-India level.

(2) Such strong correlation also existed in the case of credit distribution by the co-operatives.

(3) It follows that credit distribution, both at all-India level and by the co-operatives remained unfavourable to the small and poor farmers who constitute a great majority of Indian cultivators. This problem is given further attention in chapter V.

3.8. 1. Borrowing and Debt according to different Interest Rates: 1951-2 and 1961-2:

It has been stated that in underdeveloped countries like India, cultivators are often charged high interest rates, particularly by the unorganized agencies which consist of money-lenders, traders and landlords. The causes of the prevalence of high rates are stated to be high risks and uncertainty in lending, administrative cost, the nature of agricultural economy, monopoly power of money-lenders and the scarcity of loanable funds in relation to demand for such loans. A rigorous discussion of all these points will be attempted in the next chapter of our study. Here we shall briefly refer to the different interest rates which were charged in 1951-2 and 1961-2 and try to draw some implications from such comparison.

3.8. 2. Rate of Interest on Borrowing and Debt paid by all cultivators: All-India: 1951-2:

From the available data, the proportions of borrowings and debt at different interest rates are summarised in table A 3.11.

From the table A 3.11, it follows that the highest proportion of both borrowings and debt took place at rates varying between 18% and 25% followed by proportions of borrowing of about 21% and of indebtedness of about 23% at rates varying between 10% and 12½%. One observes that no interest rate was charged either on borrowing or debt of significant proportion (ie, about 1/5th to 1/4th of debt and borrowing). Such loans were given mainly by friends and relatives. The proportions of borrowings and debt at rates over 25% were not high and such proportions over 35% appeared to be still less. Similarly, borrowings and debt at rates varying either between 7% and 10% or between 3½% and 7% appeared to be fairly similar and low, ie, around 6 to 7 per cent.

Proportions of borrowings and debt appeared to be quite low at rates higher than 35% or lower than 3½%. It seems that exaggerated statements about interest rates need to be modified in view of these facts.

3.8. 3. Borrowing by cultivators according to different interest rates: 1961-2:

We may try to summarise the findings of the R.B.I. survey where borrowings in 1961-2 were classified according to interest rates paid by cultivators.

It is worth observing (see table A 3.12) that the highest proportion of borrowing ie, 25%, took place without any interest being paid on that, followed by 18.7% of total borrowings at rates varying between 9½% and 12½%.

About 16.5% of total borrowing was contracted at rates ranging w/ from 18 $\frac{1}{2}$ % to 25%. While 15.5% of total was accounted for by the rates varying between 6 $\frac{1}{4}$ % to 9 $\frac{1}{8}$ %. Proportion of borrowings at rates higher than 37 $\frac{1}{2}$ % seems to be very low, ie, 1.5% and that varying between 25% and 37 $\frac{1}{2}$ % seems to be quite low, ie, 4.9%.

As regards interest rates charged on debt, it is, however, unfortunate that estimates are not available for the year 1961-2. Some data are available in the Rural Credit Follow-up Survey (1959-60).¹ But this survey was made in only 9 districts. This makes the task of comparison and generalization quite difficult and hence no further attempt is made here to undertake such analysis of rates charged on debt.

3.8. 4. A comparison of rates charged on borrowing in 1951-2 with those charged in 1961-2:

It is apparent from tables A 3.11. and A 3.12. that the classification of interest rates in 1961-2 is not the same as it was in 1951-2. Nonetheless, some rough comparisons could be made on the basis of given classifications. Firstly, it may be said that the proportion of interest-free borrowing remained quite substantial for both the periods. In fact, such proportion went up slightly in 1961-2 in comparison with 1951-2. Secondly, the proportion of borrowing at rates roughly varying between 18 and 25 per cent went down in 1961-2 to 18.7% from 24% in 1951-2. Thirdly, the percentage of borrowing at rates ranging between 10% and 12 $\frac{1}{2}$ % was 21% in 1951-2. In 1961-2, at rates varying between 9 $\frac{1}{8}$ % and 12 $\frac{1}{2}$ %, 18.7% of total loans was borrowed.

1 R.B.I. - Rural Credit Follow-up Survey: 1959-60, Bombay, 1962 PP. 33-5.

Fourthly, the proportion of borrowing at rates less than 3½% in 1951-2 and 1961-2 or at rates higher than 35% in 1951-2 and 37½% in 1961-2 appeared to be quite low. Fifthly, in 1951-2, proportion of borrowing at rates varying between 7% and 10% accounted for 6.2% of total borrowing. In 1961-2, interest rates at the range of 6½% to 9½% accounted for 15.5% of total borrowings. This seems to be an appreciable change. In general, borrowing at rates ranging from 10% to 25% accounted for nearly half the total amount of borrowing by cultivators in 1951-2; in 1961-2, borrowings at rates ranging between 9½% and 25% accounted for about 43% of total borrowing. Thus, it appears that rates varying between 9½% and 25% remained the most important range as it accounted for the largest proportion of borrowing up to 1961-2.

3.9. 1. Seasonality in Borrowings:

In India, the main agricultural activities are concerned with the harvesting seasons of crops. The farmers generally raise two types of crops: (a) the Kharif crops, and (b) Rabi crops.

A clearer distinction would mean that Kharif is monsoon crop while Rabi is winter crop. The harvesting of Kharif crop takes place during and just before the monsoon months ie, May to August, while cultivation for and raising of Rabi crop takes place between November and February. In some parts of India, the Rabi crop is more important of the two, but the Kharif crop is the main crop that is harvested and raised in most parts of the country. It is f said that Farmers' demand for loans tend to be high during the monsoon season and we shall try to test this hypothesis on the basis of available information.

3.9. 2. Some Empirical Evidence: 1956-60:

It is possible to examine the nature of seasonality in the pattern of rural borrowing on the basis of Rural Credit Follow-up Surveys from 1956 to 1960. In, 1956-7, for example, such elements of seasonality were palpable and it was observed that seasonality in borrowing depended to a large extent upon the type of crop sown and harvested at different times of the year. It is further revealed that in districts like Broach, East Khandesh, Dharwar and Gaya, only one period of economic activity during the sowing season was observed. During May and August, 69% of total borrowings was contracted in Gaya, 60% in Dharwar and 35% in Broach in 1956-7. In Ferozepur, a large proportion of borrowing was reported once during August-September and again during November-February. The first period coincided with making preparation for the cultivation of Rabi crops and cotton, and the second season coincided with harvesting of cotton-crops and sowing and growth of Rabi crops.¹ In 1957-8, once again, it was observed that between May and August, 85% of total borrowing took place in Akola, 68% in Burdwan and more than 50% in districts like Monghyr, Jullundar, Nizamabad, Bangalore and Chingleput.² Similarly, in 1958-9, in all the five districts surveyed there was greater proportion of borrowing between May and August and it was particularly heavy in districts like Jalpaiguri and Ahmedabad. In Mirzapur and Hissar, where both Kharif and Rabi crops are cultivated, the proportion of borrowing was noted to be greater not only during May and August but also during February and March.³

1 See, R.B.I. - Rural Credit Follow-up Survey:1956-7, General Review Report, Bombay, 1960, PP.114-119.

2 See, R.B.I. - Rural Credit Follow-up Survey:1957-8, Bombay 1961, PP. 62-4.

3 R.B.I. - Rural Credit Follow-up Survey: 1958-59, Bombay, 1961, PP. 54-5

Further, in 1959-60, the same pattern was observed and it was revealed that more than 2/5ths of the borrowings in all districts and about half or more in six of them was contracted between May and August. It was observed: "Generally speaking, agricultural operations during the Kharif season along with the consumption needs during these lean months seem to have given rise to the concentration of borrowing during these months".¹

3.9. 3. Conclusions:

The following conclusions may be drawn from our study on borrowing and seasonality.

(a) Borrowings tend to be related to the level of agricultural activities. Such association seems to be positive.

(b) In India, presumably because of the prevalence of a monsoon-type economy, greater attention to agricultural activities is paid between May and August when the Kharif crop is sown and grown along with necessary preparations for sowing. The data available for 1956-60 help us to conclude that there is a greater concentration of borrowing between May and August in most of the districts surveyed in comparison to other quarters of the year, excepting, of course, those districts where Rabi crops were mainly cultivated.

(c) In the case of those districts where winter crop is mainly grown, the proportion of borrowing was high in winter in comparison with other times in the year.

(d) The data available showed the existence of seasonality in borrowing among the cultivators. However, greater investigations need to be carried out to identify the exact nature of seasonality.

¹ R.B.I. - Rural Credit Follow-up Survey: 1959-60, Bombay, 1962, PP. 59 - 60.

(e) The presence of seasonality may imply the necessity of introducing a flexible and seasonal rural credit policy.

3.10. 1. Borrowings and Repayments:

It may be useful to know the role played by borrowings in repayments by cultivators. Some information is available, which allows us to analyse repayments according to sources of finance, eg. owned funds, sale of assets and borrowings. Here we shall try to test the hypothesis that borrowing plays an insignificant role in repayments on the basis of data available in the Rural Credit Follow-up Surveys for 1956-60.

3.10. 2. Empirical Evidence:

In the case of all districts surveyed in 1956-7, owned funds accounted for more than 80% of repayments in all districts. Only in Bikaner did sale of assets have some importance as a source of repayments as it accounted for 18.6% of total repayments.¹

The Follow-up Surveys from 1957 to 1960 also substantiate the hypothesis that owned funds played the most important part in financing repayments.² Excepting the district of Hissar in 1958-9, where borrowing financed 21% of total repayments, in all other districts surveyed between 1956 and 1960, borrowing accounted for less than 20% of total repayments and for quite a number of districts (ie. 24 out of 37 districts surveyed), the figure was less than 10%.

1 R.B.I. - Rural Credit Follow-up Survey, 1956-7, P.141, op.cit.,

2 See i), R.B.I. - Rural Credit Follow-up Survey, 1957-8, P.69.op.cit.,
 ii), R.B.I. - Rural Credit Follow-up Survey, 1958-9, P. 59, op.cit.,
 iii), R.B.I. - Rural Credit Follow-up Survey, 1959-60, P.66, op.cit.,

3.10. 3. Conclusions:

The analysis of data for borrowings and repayments yields the following conclusions:

(a) The hypothesis that borrowings do not play an important role in repayment has not been rejected.

(b) The role of owned funds in financing repayments can be regarded as much more important in case of almost all the districts surveyed between 1956 and 1960.

3.11. 1. Borrowing and Debt according to duration:

Indian cultivators require loans for different lengths of time. It is possible to divide the loan periods into the following heads: (a) short-term; (b) medium-term; (c) long-term; Short term borrowing and debt may take place for purchasing working capital like seeds, manures, for rent payment as well as for consumption and ceremonial purposes. Medium term borrowing may occur for levelling of land, bunding, fencing or for minor irrigation works and for purchasing livestock. Long term borrowing may be explained by factors like major irrigation projects, land reclamation, purchase of tractors and other types of fixed capital, land improvement projects, land purchases and debt repayments. In the next section, we shall try to make some estimates of borrowing and debt according to different lengths of time for the year 1951-2.

3.11. 2. Estimates for 1951-2:

In one set of data (all-India) on borrowing according to duration, it is difficult to form an idea of medium and long-term borrowings by cultivators.¹ However, some notion of loans according to duration in 1951-2 may be obtained from another investigation.² It is revealed there, that for a large proportion of loans ie, 62.2%, the duration was not specified. This implies the absence of any clear definition of different durations of borrowing. Data are available when loans outstanding were classified according to duration for the year 1951-2. The statistical estimate of such data is set out in equation (17):³

$$D = -1.2242 + .9925 ST + 1.0741 IT + .8328 MT \dots (17)$$

(.0252) (.0657) (.1118)

$$+ 1.2683 LT \quad R^2 = .992$$

(.1138) D.W. = 2.45, D.F. = 25

Where D = total loans outstanding (cultivators).
 ST = short-term, ie., up to two years.
 IT = intermediate-term, ie., 2 - 5 years.
 MT = medium-term, ie., 5 - 10 years.
 LT = long-term, ie., above 10 years.

In this analysis, short-term has been defined as a period which does not exceed two years. This is because of the fact that cultivators' short-term borrowing is affected not only by their current years' needs, but also by their expectations of natural calamities and the vagaries of weather in future. Hence to calculate short-term needs, it may not be unreasonable to take into account two instead of one year.

1 See, R.B.I. - A.I.R.C.S. vol.111. PP.577-8, op.cit.,

2 See, R.B.I. - A.I.R.C.S. vol.1, pt.2, P.487, op.cit.,

3 Data obtained from R.B.I. - A.I.R.C.S. vol. 111, PP. 652-3, op.cit.,

Short-term was the most significant variable affecting debt according to duration as it alone explained 57% of total variation and this is shown in (17.1):

$$D = 123.7121 + 1.0067 ST \dots (17.1) \quad R^2 = .571$$

$$(.1650) \quad D.F. = 28$$

Short and Medium-term together explained about 89% of total variation as shown in equation (17.2):

$$D = 50.5565 + 1.0488 ST + 2.3193 MT \dots (17.2)$$

$$(.0860) \quad (.2651) \quad R^2 = .888$$

$$D.F. = 27$$

Intermediate-term came next to medium-term as shown in equation (17.3):

$$D = 32.7367 + .9555 ST + .8893 IT + 1.4939 MT \dots (17.3)$$

$$(.0598) \quad (.1524) \quad (.2271)$$

$$R^2 = .952$$

$$D.F. = 26$$

All the variables in (17.3) seem to be statistically significant.

3.11. 3. Estimates for 1961-2:

It is unfortunate that data are not available on borrowing according to duration in the R.B.I. survey for 1961-2. This may be due to the fact that information for borrowing was collected only for the survey year. However, some idea about debt according to duration can be had from the Rural Credit Follow-up Survey.¹ In the next section, we shall use the R.B.I. data for 1961-2 to analyse any change in the relative significances of different periods in the structure of debt.²

¹ See, R.B.I. - Rural Credit Follow-up Survey: 1959-60, P.288, op.cit.,

² Data are obtained from R.B.I. Bulletin, September, 1965, PP.1347-9.

The equation obtained for the year 1961-2 is set out in (18):

$$D = - 0.5428 + 1.0978 \text{ ST} + 0.5680 \text{ IT} + 1.9544 \text{ MT} + 0.8273 \text{ LT}$$

$$(.0264) \quad (.0868) \quad (.2015) \quad (.2032)$$

$$\text{D.W.} = 1.72. \quad R^2 = .999 \quad \dots(18)$$

$$\text{D.F.} = 10$$

It is interesting to observe that when the variables were introduced according to their significance, intermediate-term was the most significant variable which alone explained about 89% of total variation as shown in (18.1):

$$D = 27.0169 + 3.2935 \text{ IT} \dots(18.1)$$

$$(.3152) \quad R^2 = .894$$

$$\text{D.F.} = 13$$

$$F. = 109.18$$

Short-term came next to intermediate-term to yield equation (18.2):

$$D = 6.7221 + .8403 \text{ ST} + 1.8552 \text{ IT} \dots(18.2)$$

$$(.1306) \quad (.2724) \quad R^2 = .976$$

$$\text{D.F.} = 12$$

3.11. 4. An alternative estimate:

It may be argued that our definition of short-term may not be acceptable to those who are inclined to think that short-term is a period which runs up to one year or less. To make allowance for such argument, we have modified short and intermediate-term and tried to make estimates to see how far these results sustain our conclusions reached in section 3.11. 3. The estimates obtained for the year 1951-2 are set out in equations (19 to 19.3):

$$D = 4.6431 + 1.0480 \text{ ST} + .9003 \text{ IT} + 1.5571 \text{ MT} + .7007 \text{ LT} \dots(19)$$

$$(.0363) \quad (.0436) \quad (.1684) \quad (.1071)$$

$$\text{Where} \quad \text{D.W.} = 2.44. \quad R^2 = 1.00$$

$$\text{D.F.} = 8$$

ST = 1 year or less.

IT = one to five years.

MT = five to ten years.

LT = more than ten years.

Equation (19) seems to be a good fit. But in view of the high correlation between ST and IT ($r = .8891$), it is difficult to accept that the estimates of co-efficients of ST and IT as independent of one another and unbiased. Thus the problem of multicollinearity is involved here. In the absence of fresh data, it became difficult to break the multicollinearity deadlock. High correlation was also observed between ST and MT ($r = .7872$) and thus the estimates presented above must be accepted with caution.

When the variables were introduced according to their significance, it appeared that ST was the most significant variable which explained about 96% of total variation as shown in equation (19.1):

$$D = 28.8725 + 1.9849 \text{ ST} \dots (19.1)$$

(.1175)

$$R^2 = .963$$

$$D.F. = 11$$

$$F = 285.54$$

Intermediate and medium-term loans followed short-term as evinced in equations (19.2) and 19.3):

$$D = -12.3507 + 1.4206 \text{ ST} + .7711 \text{ IT} \dots (19.2)$$

(.1793) (.2178)

$$R^2 = .984$$

$$D.F. = 10$$

$$D = 20.9895 + 1.1357 \text{ ST} + .7397 \text{ IT} + 2.2731 \text{ MT} \dots (19.3)$$

(.0801) (.0857) (.3042)

$$R^2 = .998$$

$$D.F. = 10.$$

These estimates with alternative definition of short and intermediate term may be compared with the results obtained for the year 1961-2. The estimates for the year 1961-2 are set out in equations (20) to (20.3):

$$D = - 0.3225 + 1.0920 \text{ ST} + .9303 \text{ IT} + 1.1392 \text{ MT} + .9480 \text{ IT} \dots (20)$$

(.0344) (.0345) (.1176) (.1485)

$$D.W. = 1.82$$

$$R^2 = 1.00$$

$$D.F. = 10$$

Although equation (20) appears to be a good fit, nonetheless, the problem of multicollinearity remained in view of the high correlation between ST and IT ($r = .8845$) and again between MT and LT ($r = .8672$). If our equation is to be used for prediction purposes, then such multicollinearity need not be regarded as a serious problem provided it will continue to exist.

However, when the variables were introduced according to their significance, we find that it was intermediate rather than short-term loans which came first. This is set out in equation (20.1):

$$D = 11.2978 + 1.9936 \text{ IT} \dots (20.1): \quad R^2 = .961 \\ (.1117) \quad \text{D.F.} = 13, \quad F = 318.72$$

ST followed by MT, came next to IT in order of significance as shown in equations (20.2): and (20.3):

$$D = 4.3511 + .7872 \text{ ST} + 1.4446 \text{ IT} \dots (20.2): \quad R^2 = .981 \\ (.2194) \quad (.1730) \quad \text{D.F.} = 12$$

$$D = .8955 + 1.1042 \text{ ST} + .9020 \text{ IT} + 1.7194 \text{ MT} \dots (20.3): \\ (.0738) \quad (.0734) \quad (.1601) \quad R^2 = .998 \\ \text{D.F.} = 11$$

The difference between equations (19.1), (19.2) and (20.1) and (20.2) are now clear. Whereas in 1951-2, short-term loans were more important than other types of loans of different durations, in 1961-2, intermediate rather than short-term loans became relatively more significant. This finding reinforces the conclusions reached in 3.11. 2. and 3.11. 3.

3.11. 5: Evaluation:

The present analysis in the above sections (3.11. 1. to 3.11. 3.) has suggested that although in 1951-2, cultivators incurred debt mostly for the short period, nonetheless, in 1961-2, it was the intermediate loans that were most significant. This leads to the conclusion that the tendency of the cultivators to incur relatively more intermediate rather than short-term loans in 1961-2 in comparison with 1951-2 cannot be wholly discarded.

3.12: Conclusions:

The following conclusions may be drawn on the basis of the present analysis of the borrowing and debt of Indian cultivators in 1951-2 and 1961-2.

(a) In both the periods of analysis, the pattern of borrowing and debt remained broadly the same.

(b) On the supply side of agricultural credit, the influence of the unorganized sector, particularly of agricultural money-lenders, appeared strong in all periods of analysis of both borrowing and debt. On the other hand, the influence of the organized sector appeared small in all periods.

(c) On the demand side, one of the important conclusions that may be deduced from our study is that the existing belief about the unproductive use of loans by Indian cultivators, particularly for family consumption, has not been substantiated. In fact, it appeared that capital rather than family expenditure was the most significant explanatory variable affecting both borrowing and debt in most periods.

(d) The evidence suggested the overwhelming importance of personal security against which loans were either outstanding or borrowed in all periods.

(e) No definite conclusions could be drawn about changes in the duration of borrowing because of the paucity of data. Nonetheless, the tendency of cultivators to borrow relatively more intermediate rather than short-term loans in 1961-2 in comparison with 1951-2 may not be wholly discarded when debt was classified according to duration.

(f) The presence of the element of seasonality in the borrowings of cultivators has not been disproved in our study. This might imply the necessity of introducing a flexible credit policy.

(g) Little change has been observed in the pattern of borrowing and debt when these were analysed according to interest rates. It is possible that the rural money market had some imperfections and normal equilibrium price might not have been observed. This is a topic which requires closer examination and it will be discussed in detail in the next chapter.

RURAL INTEREST RATES IN THE INDIAN ECONOMY:4. 1: INTRODUCTION:

The dual nature of the Indian moneymarket accounts for the existence of different rates of interest. Within the unorganized money market itself, it is possible to identify different interest rates charged by different types of indigenous financial agencies. In this chapter, firstly we shall attempt to describe such rates and this will be followed by an analysis of the causes of "high" interest rates in the unorganized sector of the Indian money market.

A theoretical model will then be constructed and an attempt will be made to test some of its properties empirically. Further, we shall try to explore the relationship between the rates prevailing in organized and unorganized sectors. As regards the structure of Indian rural interest rates, it is difficult to argue that there is a clear division between short and long-run interest rates because Indian cultivators seldom make a clear distinction between short and long-term credit. Moreover, little information is available on short and long term rural interest rates and hence, no attempt is made here to analyse such rates. Throughout our discussion here, we shall be mainly concerned with money rates though we shall try to refer briefly to 'kind' rates. The conclusions derived from our discussion may be useful in examining the real nature of 'usurious'¹ interest rates in Indian rural areas and in detecting some of their actual causes. This may reveal interesting policy implications.

1 See, for example, L.C.Jain, op cit., P.110. See also, Henry W.Wolff Co-operation in India, W.Thacker & Co., London, 1919, P.3, particularly the following comment:

"It is usury - the rankest, most extortionate, most merciless usury - which eats the marrow out of the bones of raiya* and condemns him to a life of penury and slavery in which not only is economic production hopeless, but in which also energy and will become paralysed and man sinks down beaten into a state of resigned fatalism from which hope is shut out and in which life drags on wearily and unprofitably as if with no object in view".

* Italics mine; raiya means peasant.

4.2. 1. Some Past Estimates of Rural Interest Rates in India:
The Indian Central Banking Enquiry Committee. (1931):

It is possible to form some idea about the nature of the interest rates that prevailed in Indian rural areas from some of the estimates in the past. Some of these rates were described by the Central Banking Committee(1931). Rates charged by the money-lenders showed wide variations in different Indian provinces. They appeared to be low for secured and high for unsecured loans and they varied between 6 and 360 per cent. Rates varying between 6 and 8 per cent may be regarded as low and rates higher than 18 - 20 per cent may be regarded as high for the purpose of our analysis. The Banking Committee regarded interest rates prevalent throughout India as high.¹

Analysing the causes of such high rates, the Committee emphasized the risk element in the cost of credit given by money-lenders, To quote: " The money-lenders who lend money in these circumstances are taking a risk which other organized credit agencies do not take and they have, therefore, to protect themselves against loss by charging high rates of interest. The fact that the high rates of interest are of the nature of an insurance against risk is forcibly brought out in some of the Provincial Committees' reports where the money-lenders' stipulated rates of interest have been compared with what they actually receive by way of net profit!"²

1 Government of India - The Indian Central Banking....(1931)
 PP. 81-2, op.cit.,

2 Ibid. P.82.

The Banking Committee (1931) rightly drew attention to the risk premium as one of the major factors accounting for a 'high' rate of interest. Unfortunately, no attempt was made to assess and measure the extent to which the risk factor accounted for high interest rates.

4.2. 2 Estimates of the A.I.R.C.S. : 1951-2:

In the All-India Rural Credit Survey (1951-2), a fairly comprehensive picture of the different interest rates that prevailed in the rural economy in 1951-2 may be obtained. It was revealed that different rates were charged by the urban, village and agricultural money-lenders and such rates broadly followed the same pattern and varied between a very low level to as high as 50 per cent or more. The highest proportion of borrowing from all types of money-lenders generally took place at rates varying between 9½% and 25% though in some cases rates fluctuating between 25% and 37½% accounted for a fairly large proportion of total borrowings.¹ It was also noted that 63.1% of total loans borrowed from the village money-lenders (ie., money-lenders who stayed mainly in the villages) took place at rates varying between 9½% and 25%, 72.2% of total loans borrowed from agriculturist money-lenders (ie., money-lenders whose major source of income was agriculture and secondary source was money-lending) varied between 10% and 25% rates - a range which accounted for 63.5% of total borrowings from professional money-lenders (ie., money-lenders whose main source of income was money-lending).

¹ R.B.I. - A.I.R.C.S., vol.1. Pt.2, PP.490-1, P562, PP.592-5, P.597 for tables, op.cit.,

Nevertheless, it was generally observed that there was a lower proportion of borrowing at rates which were either very low or very high in comparison with more the usual level, which in U Tun Wai's calculation varied between 24 and 36 per cent in most of the underdeveloped countries.¹

4.2. 3. Estimates of the Rural Credit Follow-up Surveys:1956-60:

In several Rural Credit Follow-up Surveys, some indications of the pattern of interest rates charged on rural credit can be obtained. These surveys, though useful in providing information on the nature of interest rates in some Indian rural areas, are not comprehensive.

The pattern of interest rates observed in the Follow-up Surveys does not seem to be very different from that in the survey in 1951-2. Between 1956 and 1960, no interest was paid on about 13% - 16% of total loans borrowed by cultivators. The largest proportion of borrowings took place at rates varying between 9½% and 25%.²

1 U Tun Wai, op.cit., I.M.F. Staff Papers, November, 1957, P.102 op.cit., See also, Sir Malcolm Darling - The Punjab Peasant in Prosperity and Debt, Fourth ed. Oxford University Press, London, 1947, P.184., where the average interest rate in Punjab was calculated as 11% in 1931.

2 i) R.B.I. - Rural Credit Follow-up Survey, 1956-57, PP.110-1 op.cit., ii) R.B.I. - Rural Credit Follow-up Survey, 1957-58, P.61, op.cit., iii) R.B.I. - Rural Credit Follow-up Survey, 1958-59, PP.51-2, op.cit., iv) R.B.I. - Rural Credit Follow-up Survey, PP.57-8, op.cit.

The proportion of rates varying between 25% and 50% rose from about 3.88% in 1956 to 13.44% in 1960. Borrowings at rates varying between 5% and 9 $\frac{1}{4}$ % accounted for roughly 1/5th of total borrowings between 1956 and 1959, but it accounted for only about 1/10th of total borrowings in 1959-60. It follows, therefore, that subject to the limited range of observations during 1956-60, interest rates varying between 9 $\frac{1}{4}$ % and 25% accounted for the highest proportion of total borrowings and such proportion generally tended to be low either at a very low or at a very high interest rate. It would have been interesting to analyse interest rates according to size of holdings and different classes. Unfortunately, little data are available to carry out such analysis at the moment. Another interesting field of enquiry would have been regional variations in interest rates but since we are mainly concerned here with all-India analysis, no attempt is made to carry out a regional or state-wise enquiry.

4.2. 4. Estimates of Rural Debt and Investment Survey:1961-2:

The Rural Debt and Investment Survey conducted by the R.B.I. in 1961-2 gives us some further idea of interest rates in rural areas. But there was no breakdown of the different rates charged by different types of financial agencies. However, data collected by the R.B.I. are useful in revealing that range of interest rates which accounted for the highest proportion of borrowing by the cultivators.

Thus, it may be stated that the largest proportion of borrowing took place at rates varying between $9\frac{3}{8}\%$ and $12\frac{1}{2}\%$ followed by rates varying between $18\frac{3}{4}\%$ and $25\frac{1}{2}\%$. The average interest rate in 1961-2 stood at 14.76% while it was 16.84% in 1951-2. The following table (4.1) illustrates the average interest rate in different years where we have calculated such average by the formula

$$\sum fx / \sum f = \bar{x}^1$$

Table 4.1: AVERAGE INTEREST RATES BETWEEN 1951-2 and 1961-2.

YEARS	Average Interest Rates paid on borrowing by the cultivators (Per cent).
1951-2	16.8368
1956-7	15.0883
1957-8	14.8516
1958-9	17.3088
1959-60	18.0567
1961-2	14.7589

- Sources:
- i) R.B.I. A.I.R.C.S., vol.111, PP 583-4, op.cit.,
 - ii) R.B.I. - Rural Credit Follow-up Surveys, 1956-60. loc.cit.
 - iii) R.B.I. Bulletin, September, 1965, PP 1381-3.

1 Here the numerator stands for the sum of the product of the midpoints of the class intervals and the number of frequencies and the denominator stands for their total frequency.

4.3. 1. Interest Rates charged by the Organized Agencies:
Rates of Primary Co-operative Credit Sources:

In the field of agricultural credit, the lending rate of the organized agencies like co-operatives, government and banks are different from those charged by unorganized agencies. The rates charged by the primary agricultural credit co-operative societies are stated here. Our choice of lending rates of the primary societies is deliberate in view of the fact that these primaries and not the District or State Co-operative Banks lend directly to the cultivators.

The rates charged by the primary credit societies largely varied between 3% and 12½% p.a. between 1951-2 and 1953-4 though rates as high as 19% p.a. in Vindhya Pradesh (now parts of Madhya Pradesh) and 24% p.a. in Manipur were observed in the same period. Between 1954-5 and 1966-7, rates varied mostly between 4% and 4½% p.a. to 12½% p.a. though in isolated cases, rates went up to 24% p.a.¹ Between 1957-8 and 1966-7, the usual rates varied between 6½% and 12½% p.a.

It is evident from the above analysis that the usual rates charged by primary credit societies remained fairly stable over time. We shall now examine the rates charged on government loans.

4.3. 2. Rates charged by the Government:

Although the government finances agriculture indirectly through the Reserve Bank and the State Bank of India as also through the Agricultural Credit and Agricultural Refinance Corporations, direct lending by the government to the farmers is not high. However, from time to time, government lends to farmers to provide relief from distress arising out of famine or flood.

¹ For details, see, R.B.I. - Statistical Statements relating to the Co-operative Movements in India, 1954-5 to 1967-8.

Government loans which are directly given to the agriculturists are usually regarded as "taccavi" loans and generally interest rates on these loans are quite low. From the available data, it may be stated that the rates generally go up to 6½% p.a. In some cases, rates are more than 6½%, though in quite a number of cases, no interest is charged at all.¹

4.3. 3. Interest Rates on Loans by Commercial Banks:

It has been pointed out that the commercial banks provided only 0.9% of the total borrowings of cultivators in 1951-2.² In 1961-2, banks accounted for only 0.6% of such total borrowings and advances of all scheduled commercial banks for agriculture (excluding plantations) was only 1.1% of their total advances by the end of June, 1968.³ Generally, the commercial banks lend to the agricultural sector indirectly though of late some direct financing has taken place. The rates charged by the commercial banks were generally little below 10% in case of direct lending.⁴ Commercial banks generally refrained from direct lending to agriculture in a large scale because of the nature of agricultural economic activity, fluctuation in prices, long gestation periods, absence of sound collateral in the rural economy and difficulties in realizing the values of the collateral that is usually offered in less developed countries including India (ie., land) because of many legal complications and lack of proper title rights.

1 See, R.B.I. A.I.R.C.S. vol.1. Pt.2, PP.152-5, op.cit.,

2 Ibid. P.3.

3 R.B.I. - Financing of Agriculture by Commercial Banks: Report of a Seminar held on December, 6 to 8, 1968, Bombay, 1969, P.51, and P.55.

4 R.B.I. - Ibid. P.144.

However, the rates charged by commercial banks could be fairly important if they undertake the task of lending to agriculture indirectly through financial intermediaries like co-operatives. Here the commercial banks may have to consider the opportunity cost of lending which involves careful considerations of alternative returns from industry through bank lending. If the commercial banks find surplus funds during the slack season, then such funds may be diverted through agricultural financing agencies at whatever returns they may fetch to the banks. To cover opportunity cost, ie, the returns from holding government securities, such lending may take place at rates higher than government bond rates.

4.3. 4. Interest Rate charged by the State Bank of India:

Direct financing of farmers by the State Bank of India was not envisaged until very recently. The total assistance rendered by the State Bank and its subsidiaries was Rs. 335.00 crores in the aggregate by the end of June, 1968, in terms of limits sanctioned and Rs. 211.00 crores in terms of outstanding.¹ Very recently, the State Bank has started lending directly to the agriculturists - in one case to a firm in Amraoti in Maharashtra and in another case to fishermen of Ratnagiri district in the same state.² The rate of interest charged varied between 8½% and 9½% p.a.³ Such rates compare favourably with the rates charged by co-operatives.

1 See, R.B.I. - Financing of Agriculture by Commercial Banks(1969) P. 129, op.cit.,

2 Ibid. PP. 130 - 131.

3 Ibid. P. 133.

4.3. 5. Conclusion on Interest Rate charged by Organized Agencies:

The discussion of the different interest rates charged by organized agencies leads to the conclusion that, on the whole, the usual rate in the organized sector is lower than the usual rate in the unorganized sector. Roughly, the rate charged in the organized sector varied between 8% and 9.38% and that in the unorganized sector varied between 15% and 17%.¹ Further, the range of fluctuations in the rates prevailing in the organized sector is less than those prevailing in unorganized sector. However, the discussion of the relationship between the Bank Rate and the Bazaar rate ie, the rate at which the bills of the small traders are discounted by the shroffs will be made at a later stage of our analysis.

1 See table 4.1

4.4.1. Theory of Interest Rate Determination in Underdeveloped Rural Money Market:

The problem of interest rate determination in underdeveloped rural money market has not gone unnoticed among economists.¹ It is contended that the typical village money-lender is either a monopolist or an imperfect competitor.² It is said that frequently these money-lenders charge high interest rates because they can take advantage of their monopoly position and the exploitation of such monopoly power helps the money-lender to reap some monopoly profit in the rate of interest that he charges.

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- 1 See, for example, a) Anthony Bottomley, "The Premium for Risk as a Determinant of Interest Rates in Underdeveloped Rural Areas" in The Quarterly Journal of Economics, vol. LXXVII, Nov., 1963, PP. 637-47.
 b) Anthony Bottomley, "The Cost of Administering Private Loans in Underdeveloped Rural Areas" in Oxford Economic Papers, vol. 15, No. 2, July, 1963, PP. 154-63.
 c) Anthony Bottomley, "The Structure of Interest Rates in Underdeveloped Rural Areas" in Journal of Farm Economics, vol. 46, No. 2, May 1964, PP. 313-22.
 d) Anthony Bottomley, "The Determination of Pure Rate of Interest in Underdeveloped Rural Areas" in The Review of Economics and Statistics, vol. XLVI, No. 3, Aug. 1964, PP. 301-304.
 e) Anthony Bottomley, "Monopoly Profit as a Determinant of Interest Rates in Underdeveloped Rural Areas" in Oxford Economic Papers, vol. 16, No. 3, Nov. 1964, PP. 431-37.
 f) Anthony Bottomley and Donald Nudds, "A Widow's Cruse Theory of Capital Supply in Underdeveloped Rural Areas" in The Manchester School of Economic and Social Studies, No. 2, June, 1969, PP. 131-40.
 g) Anthony Bottomley - Factor Pricing and Economic Growth in Underdeveloped Rural Areas, Crosby Lockwood & Son Ltd., London, 1971.
 h) Millard Long, "Interest Rates and the Structure of Agricultural Credit Markets" in Oxford Economic Papers, vol. 20, No. 2, July, 1968, PP. 275-88.
 i) George Rosen, "Capital Market and the Industrialization of Underdeveloped Economies", in The Indian Economic Journal, vol. VI, No. 2, Oct. 1958, PP. 172-94.
 j) S. Thirumalai, "Role of Interest in Reorganisation of Rural Credit" in Indian Journal of Agricultural Economics, vol. XI, No. 2, April-June, 1956, PP. 103-12.
 k) U Tun Wai, op.cit., I.M.F. Staff Papers, Nov. 1957, PP. 80-142.
- 2 a) A.G. Chandavarkar, "The Premium for Risk as a Determinant of Interest Rates in Underdeveloped Rural Areas" in The Quarterly Journal of Economics, vol. LXXIX, No. 2, May, 1965, PP. 322-25. For a critique of Chandavarkar's thesis, see Anthony Bottomley, "Reply", Ibid., PP. 325-27.
 b) Charles Nisbet, "Interest Rates and Imperfect Competition in the Informal Credit Market of Rural Chile" in Economic Development and Cultural Change. Vol. 16, Oct. 1967, PP. 73-90.
 c) Anand G. Chandavarkar, "Some Aspects of Interest Rate Policies in Less Developed Economies : The Experience of Selected Asian Countries" in I.M.F. Staff Papers, vol. XVIII, No. 1, March, 1971, PP. 48-112.

In the context of the Indian rural economy, Chandavarkar argued that since the density of money-lenders as a professional class was very low, therefore such a state was favourable to the growth of monopoly in the business. It was argued that the socio-economic structure of Indian rural society prevented the growth of competition independent of the number of money-lenders. Further, since the money-lender is sometimes both a merchant or middleman and a landlord, therefore he could not only overprice the credit to be given to the cultivators but also underprice the produce of the borrower-cultivators when he buys the farmers' products. Thus in both ways, the money-lender can appropriate monopoly gains.¹ Similar appropriation of monopoly profit has also been mentioned in other underdeveloped countries like Malaya² and Chile.³ The exploitative gains or profits of a monopolist - cum - monopsonist money-lender who is interested in maximising profit may easily be seen by using any text-book diagram.⁴

4.4. 2. Evaluation of Chandavarkar - hypothesis:

It is difficult to accept the hypothesis advanced by Chandavarkar about the monopolistic exploitation of money-lenders. For one thing, there is lack of adequate data to evaluate the cost and revenue sides of the money-lender who is both a monopolist and a monopsonist. In the absence of such data, one wonders how Chandavarkar could state that "...the wide gap between risk and actual interest charged is largely explained by the monopoly profits of money-lending, which attracts the social odium of usury in these countries!"⁵

1 A.G.Chandavarkar, op. cit., in The Quarterly Journal of Economics, May, 1965, P.322.

2 See, Charles Gamba, "Poverty and Some Socio-Economic Aspects of Hoarding, Saving and Borrowing in Malaya" in The Malayan Economic Review, vol.111, No.2. October, 1958, PP.33 - 62.

3 See, Charles Nisbet, op. cit., P.81.

4 See, for example, H.H.Liebhaufsky - The Nature of Price Theory, Revised Ed., The Dorsey Press, Homelands, Illinois, U.S.A. 1968, PP.377-81.

5 See, A.G.Chandavarkar, op. cit., The Quarterly Journal of Economics, May, 1965, P. 324.

For another, Chandavarkar made no attempt to distinguish between the risk-element and monopoly profit in the interest rate charged by money-lenders and hence one cannot tell from his writing how much of the rural interest rate charged was due to the risk-element and how much could be regarded as monopoly profit. Further, Chandavarkar's way of measuring competitions in terms of the number of money-lenders in a village may be misleading. As Long observes; "In 64% of all villages in the sample cited by Chandavarkar, there was not a single reported lender. If one lender in a village implies monopoly (which according to Chandavarkar's data exists only in 11.5% of Indian villages),¹ what does the absence of lenders imply?"² Long suggested that it does not imply that there was no borrowing. Some farmers might have failed to respond or farmers in the absence of money-lenders in a village might have borrowed from outside the village. Again, the figures for total lenders in an area understates the degree of concentration since in very few cases, the borrowing cultivator may have access to all lenders. Long pointed out that within the credit structure of a developed economy, loans made by consumer finance companies (who charge 24% p.a. on the average) would appear to be very similar to farm loans in poor countries since both types of loans are small in size, of short duration, usually unsecured and expensive to administer. Yet the combination of administrative costs and losses through default in the agricultural credit markets of underdeveloped countries are probably higher than those of consumer finance firm in the U.S.A. and thus money-lenders may charge interest rates as high or higher than the latter.³

1 Italics mine.

2 Millard Long, op.cit., P.277

3 Ibid. P.281.

It is observed above that Chandavarkar did not try to quantify the different elements in the cost side of the rural interest rate.

In the absence of such quantification, it is difficult to subscribe to the theory of exploitative monopoly gains of money-lenders. In other underdeveloped countries, the theory of such exploitative gains has not been wholly substantiated. After analysing the Malayan case, Wharton argued: 1. "Multiple-threat dealers (ie, marketer, merchant and money-lender)"¹ are rare and more likely to be found exactly in those situations which are accompanied by conditions inhibiting sizeable exploitative gains. 2. Double-threat dealers, (ie, marketer-cum-money-lender),² are more common, but the prevailing situation is closer to the oligopsony or imperfect competitive model than the monopsony model and hence exploitative gains are likely to be reduced".³

In the next few sections, we shall examine some of the studies which have been made to quantify the different elements in Indian rural interest rate.

4.4. 3. Long's study in Indian Rural Interest Rate:

On the basis of data available in the A.I.R.C.S. for the year (1951-2). Long constructed a table where he described the likely annual interest rate in the Indian rural economy by duration and risk.⁴

1 Italics mine.

2 Italics mine.

3 See, C.R. Wharton, Jr., "Marketing, Merchandising, and Money-lending: A note on Middleman Monopsony in Malaya" in The Malayan Economic Review, vol. VII. No.2. October, 1962. P. 43.

4 Millard Long, op.cit., P. 284.

Taking the expected net return on portfolio of agricultural loans as 5.4%, ie, 2% above the bond rate, 3.3% as average risk-premium and 3% as average administrative cost, Long showed how the interest rate per annum of a loan with no risk of default would be 8.4%, with 1% risk of default is 9.5%, with 10% risk of default is 20.5% and with 20% risk of default is 33.5%. Distribution of rates according to risk and duration was constructed by using the time-marginals and, with the assumption that all short-term loans would fall in the cells with low-risk of default because of greater accuracy with which the lender can predict the prospects for repayments and because there could be less demand for credit at high rates.

4.4. 4. Evaluation of Long's Measurement:

Long's attempt to quantify the different elements of rural interest rate in India merits attention. Nevertheless, it is possible to criticise his method of measurement on the following grounds:

(a) Long's assumption about the average risk of default ie, 3.3% p.a. seems to be quite low. The rate seems, as it will be shown subsequently, to be higher in many cases.

(b) The assumption about administrative cost ie, 3% p.a. again seems to be fairly low since loans are small in size, scattered and short in duration. Moreover, a small number of borrowers per money-lender as well as the possibility of keeping funds idle in off-season adds to the opportunity cost.¹

¹ See Anthony Bottomley, op. cit., Oxford Economic Papers, July 1963, pp. 154 - 163.

(c) While calculating interest rates according to risk of default and duration, Long did not make it very clear how the time-marginals have been actually applied to derive the interest rates.

(d) It is difficult to accept Long's assumption that all short-term loans had low risk of default.

Notwithstanding these criticisms, it should be mentioned that Long's analysis of interest rates in underdeveloped countries, particularly in India, provides useful insight into the quantitative aspects of the problem.

4.4 5. Bottomley's Estimation of Rural Interest Rates in Underdeveloped Countries:

In a series of interesting articles, Anthony Bottomley tried to explain and determine rural interest rates in underdeveloped countries including India.¹ Here we shall briefly examine the salient features of Bottomley's theory.

Bottomley argued that a money-lender in an underdeveloped country generally faces a demand curve for loans which slopes downward if we measure interest rate in the vertical axis and the demand for loans in the horizontal axis. This is so because the lower the interest rate, greater is assumed to be the demand for loans. Similarly, the supply curve slopes upwards because it is assumed that the higher the interest rate, greater will be the supply of credit. The supply curve is based on mainly three types of costs which may be written as follows:²

$$L_m = C + P + A$$

Where L_m = total loan charges.
 C = the opportunity cost of the principal.
 P = risk-premium because of unwillingness to repay.³
 A = administrative cost of lending by money-lenders.

¹ See, this chapter, p. 116

² See, Anthony Bottomley and Donald Nudds, op.cit., The Manchester School ... June, 1969, PP. 131-40.

³ Bottomley has distinguished willingness to pay and ability to pay.

Bottomley argued that the opportunity cost of lending by village money-lenders (ie, the pure rate of interest which may prevail for government bonds) should be about twice the rate charged by the urban banker since the fund of village money-lenders remains unemployed for nearly six months every year and as such the money-lender may ask for compensation for what he lends. The risk-premium is assumed to be less for the village money-lenders in comparison with an urban banker since economic and social co-ercion ~~act~~ in such a way as to help the village money-lender to get back the loans given in a relatively easier way in comparison with an urban bank. This is so because village ties are not simply economic but also social and institutional. The administrative costs of the lender depends upon a variety of conditions and such administrative costs for the village money-lenders should not be very low chiefly because of small size and short duration of such loans, less number of borrower per lender and greater number of individual loans.¹ Bottomley and Nudds then assumed that the higher the principal(P), the higher the income from it, but subject to the law of diminishing returns beyond a certain level of investment as shown in Bottomley and Nudds' diagram which we have reproduced here..

1 See, Anthony Bottomley, op.cit., Oxford Economic Papers, July, 1963, PP 154-63.

Returnable income at the end of loan period is estimated net of family subsistence allowances and this gave net returnable income $I + P$. Its expected value is regarded as $\bar{I} + P$ which assumes a functional relationship to P as shown in fig.IV.1. and subject to the law of diminishing returns and \bar{I} curve is made convex to the horizontal axis. Lines $L_m (= C + P + A)$ as also $I (= L_m + \text{monopoly profit})$ are also drawn. Interest asked by money-lenders is shown by R curve. When a cultivator's $I + P > R + P$, money-lender is paid back in full. If this is not the case, cultivator repays whatever he can. With the lines (1), (2) and (3) showing the series of average interest rates received by money-lenders in fig.IV.2. borrower's net returnable income (ie, total income net of principal rent and subsistence expenses) with primitive technique is shown by \bar{I}_x . With improved technology, this curve becomes \bar{I}_y as capital borrowed and are transferred to more productive uses. In fig.IV.2. interest costs of a village money-lender is L_m , and that of urban bank is L_{m2} as it is assumed that the lending cost of urban bank is greater than that of a village money-lender. This difference is assumed to be diminishing with the rise in the size of principal. The slopes of lines (1) and (2) in fig.IV.2. show the average interest rate obtained by monopolistic money-lender where productivity changes from \bar{I}_x to \bar{I}_y reflecting that average interest rate obtained may fall from the slope of (1) to that of (2) as borrower's productivity went up. It is concluded that lowest average rates are received where borrower's productivity is the highest.¹

1 See, Anthony Bottomley and Donald Nudds, op. cit., The Manchester School..., June, 1969. P. 139.

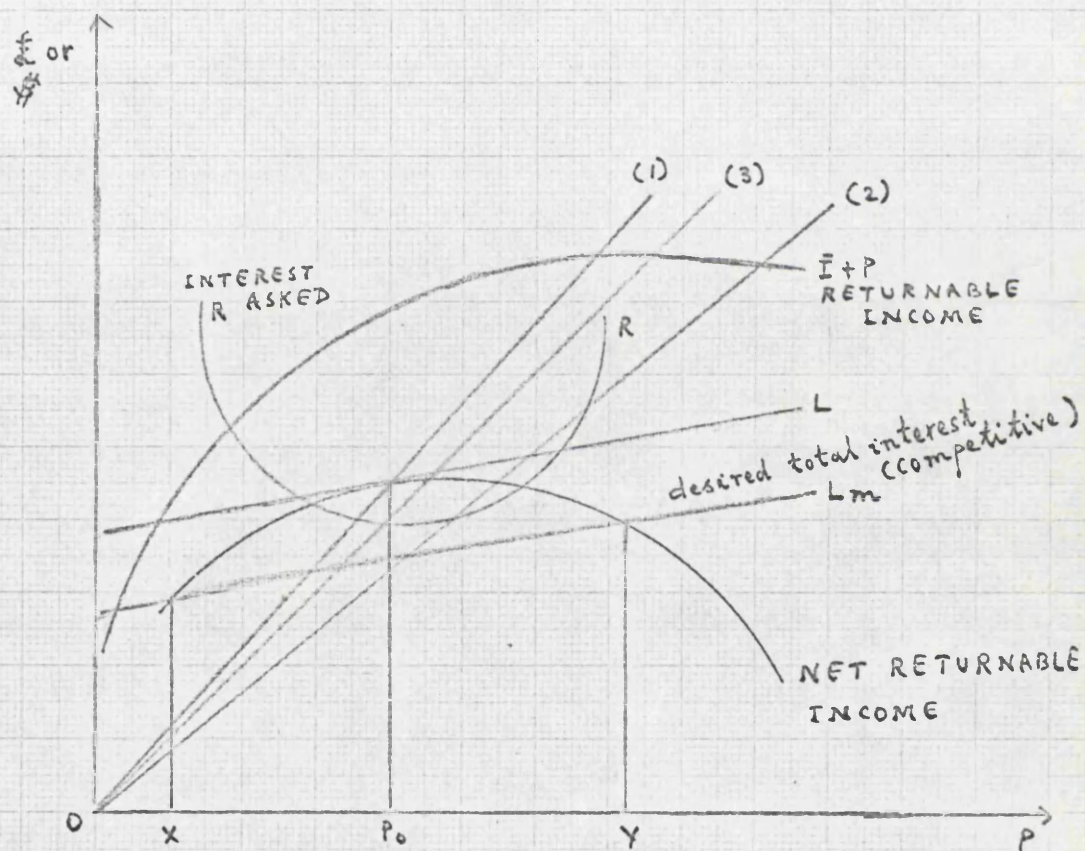


FIGURE IV.1

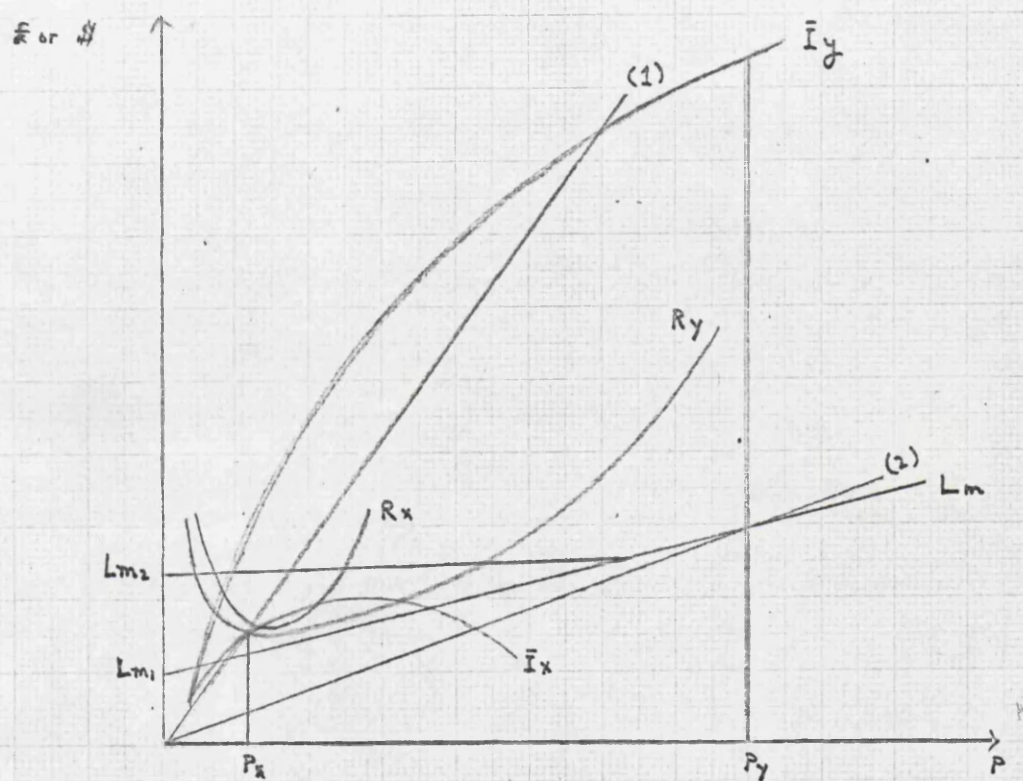


FIGURE IV.2.

Productivity of the borrower and his returnable income may be raised through innovation in rural areas. The policy implication derived from the study was as follows:

"A successful credit policy will not consist in blanket attempts to finance the status quo at a lower rate of interest. Rather must a government attempt to ally rural innovation with an increasing contact with the urban money market".¹

To illustrate the validity of the arguments stated above, Bottomley and Nudds quoted some examples. Thus, in Mexico, the rate of interest is about 8% and repayment is always about 100%. Low rates of interest and high rates of recovery was also observed in India.²

In the above analysis, the monopoly element in rural interest rate has not been considered and this is examined in the next section.

4.4. 6. Monopoly element in Interest Rate charged by Money-lenders:

The different components of the rural interest rate have been summed up as follows:³ (a) unit opportunity cost of lending money; (b) unit administration charges; (c) unit risk-premium and (d) unit monopoly profit. The first three components are supposed to provide the average and marginal cost of lending.

1 Ibid. P. 139.

2 See, F.A.O. - New Approach to Agricultural Credit, Rome, 1964 P. 30, P. 55. and PP 73-9 cited by Anthony Bottomley and Donald Nudds, op.cit., in The Manchester School ... June, 1969, P. 140., fn. 3.

3 Anthony Bottomley, op.cit., Oxford Economic Papers, November, 1964. PP 431-7. See, also Anthony Bottomley, op.cit., The Quarterly Journal of Economics, May, 1965, PP. 325-7.

The money-lender has also a demand schedule for his loans. Maximum profit is obtained at that point where marginal cost intersects the marginal revenue from below. The theory of discriminating monopoly would apply where the money-lender is charging different rates from different customers.¹

The existence of different interest rates in unorganized money markets of underdeveloped countries including India is certainly not questioned here. But what may be precisely questioned is the necessary link between the existence of such rates and the practice of discriminating monopoly. The interest rate may be different in different rural areas simply because the risk-premium may be different.

The existence of monopoly profit in the rural rate, as stated by Chandavarkar and others² has been questioned by Bottomley.

1 For a theoretical discussion of bank's discrimination in farm loans, see, for example, Reynold P. Dahl, "Some Price Discrimination Aspects in Bank Farm Loan Interest Rates" in Journal of Farm Economics, vol. XLIV, No. 1, February, 1962. PP. 126 - 140. Such discrimination is said to be rare in practice. In Indian case, such price discrimination is not known to be existing in practice.

2 See, for example, i) U. Tun Wai, op cit., IMF Staff Papers, November, 1957, P. 124. ii) R. B. I. - A. I. R. C. S. vol. 11, P. 102, P. 172, op cit., iii) S. G. Panandikar op cit., PP. 58-9 and PP. 62-3.

While Chandavarkar believed that the unit monopoly profit may be greater than the sum of other three components in rural interest rate, Bottomley argued that this may not be the case for the following reasons:¹

(a) Money-lenders opportunity cost is equivalent to the return that he can get on alternative riskless investment^{or} as the reward for sacrificing liquidity. But since the village money-lender's opportunity cost also depends upon the duration of loans and since for about six-months in a year, the fund of the money-lenders remains idle, therefore, if the interest rate or riskless alternative investment is 8% p.a. the village money-lender will be justified in charging 16% for six months to cover the opportunity cost of seasonally idle funds.

(b) The unit administration cost of a typical small and short-term loan advanced by money-lender is regarded as high.

(c) The risk-premium for village money-lender is treated as high since the farmers frequently fails to provide suitable collateral for getting credit.

(d) Even if monopoly profit is reaped by the village money-lender in certain villages, it will be difficult to sustain such monopoly profits in the face of increasing inter-village mobility of money-lenders which will eventually reduce the rural rate of interest.

1 Anthony Bottomley, op.cit., The Quarterly Journal of Economics, May, 1965, PP. 326 - 7.

The arguments advanced by Bottomley are interesting but it needs to be pointed out that both sides seem to be operating in an empirical vacuum (or close to it). What is important here is to try to define as clearly as possible the meaning of 'monopoly situation' and to contrast it to the situations of a typical Indian village or villages. This obviously requires further research and investigation at the village level.¹ However, in the next section, we shall try to show how in the presence of risk-premium alone, high interest rate charged by the money-lenders may be obtained.

4.5. 1. An Alternative way of determining Interest Rate in Underdeveloped Rural Economies in presence of risks:

In this section, we shall examine briefly the hypothetical rural interest in underdeveloped countries in the presence of risks.

Then, with Indian data, we shall try to show their empirical relevance. To begin with, we divide risks under the following heads: (a) natural, (due to, say, disease or bad weather); (b) technical, eg, failure of farming and storage, processing, and transport; (c) commercial, ie, risks arising from price fluctuations; (d) financial, ie, failure of repayment. Risk of type (d) is more a problem of illiquidity rather than insolvency.²

1 A recent micro-study of a few Punjab villages in India revealed that "monopoly profits accounted for not more than 6% of the interest" (P.475). See, Karam Singh, "Structural Analysis of Interest Rates on Consumption Loans in an Indian Village" in The Asian Economic Review, vol.X, No.4. August, 1968, PP.471-5.

2 See, F.A.O. of the United Nations, Dr.Horace Belshaw - Agricultural Credit in Economically Underdeveloped Countries, Rome, 1959, PP 98-101.

See also, John W.Mellow - The Economics of Agricultural Development, Cornell University Press, Ithaca, New York, 1966, PP. 315-7.
K.S.Suryanarayana, "Reorganisation of Rural Credit in India" in The Indian Journal of Agricultural Economics, vol XI, No.2. April - June, 1956, P.43.

At the beginning, we assume away any element of monopoly profit and administrative cost in rural interest rate in underdeveloped countries. The rural interest rate ($=r$) is assumed to be the sum of opportunity cost ($=\alpha$), administrative cost ($=\beta$), risk premium ($=\pi$) and monopoly profit ($=\mu$). Therefore, we have,

$$r = \alpha + \beta + \pi + \mu$$

We have already assumed that $\beta = 0$ and $\mu = 0$. We further assume that the risk-premium is related to the ability of recovery ($=p$) in such a way that the higher the probability of recovery ($=p$), the lower is the risk-premium and where $p = 100$ per cent, risk-premium is nothing. We then use the following formula to derive the rural rate ($=r$):

$$r = \frac{1 + \alpha}{p} - 1$$

Thus when $\alpha = .05$ and $p = 1.00$

$$r = \frac{1 + .05}{1.00} - 1 = 0.5 = 5\%$$

When $\alpha = .05$ and $p = .90$

$$r = \frac{1 + .05}{.90} - 1 = .166 = 16.6\%$$

It is now possible to construct a schedule (see table 4.2.) on the basis of different assumptions about the probability of recovery, assuming that $\alpha = .05$ or 5% in all cases. The value of r approximates to the Bank Rate which may be considered as 'pure rate' or opportunity cost. The different values of p are taken from the probability of default as viewed by the money-lenders.¹

¹ See, for example, R.B.I.- A.I.R.C.S. vol.1.Pt.2, P.476, P.501. op.cit.,

It must be mentioned that the assumption about α is based on the possibility of alternative use of funds by Indian village money-lenders and either the deposit rates of the co-operative banks or the post-office-savings bank rate may be treated as a closer approximation to the rate we have assumed here.¹

From table 4.2, it is easy to find out that as the probability of default rises ($= 1 - p$), r rises. It also follows from the table that with a 70% chance of recovery, the money-lenders may be justified to charge 50% interest rate. If the money-lender's administrative cost is added to this, the rate could be higher than 50%, and even such rates may not contain elements of monopoly profit.²

1 See, John, W. Mellor, *op. cit.*, P. 318, "...opportunities for productive investment are few relative to saving capacities in rural areas and hence pure interest, in the sense of return on money itself, is relatively low in the rural sector of low-income countries".

2 *Ibid.* PP. 316-7. Mellor tried to explain rural interest rates mainly in terms of high risk and administrative cost. He argued: "The evil arises not so much for conscious collusion among money-lenders or in an unusual degree of immorality among money-lenders but rather from the nature of credit and the borrowers and the resultant credit system". See also, Martin, W. Wilmington, "Aspects of Money-lending in Northern Sudan" in *The Middle East Journal*, Spring, 1955. PP. 139-140. The writer thought that monopoly element in 'high' interest rate in Sudan may not be much. To quote: "No thought is given to the debtor ethics which makes collection a strenuous and costly affair. Nothing is said about 'bad debts' and the annual losses they cause the money-lenders...No consideration is given as to where the money-lenders themselves obtain funds for business; they, in turn may have borrowed at the exorbitant rates..." PP. 139-140.

TABLE 4.2. : The probability of recovery and Rural Rate of Interest:

P	α	r
1.00	.05	.0500
0.95	.05	.1025
0.90	.05	.1666
0.85	.05	.2353
0.80	.05	.3125
0.75	.05	.4000
0.70	.05	.5000

Here

P = probability of recovery

α = opportunity cost

r = rural interest rate

A rate higher than 50% charged by money-lenders is found in few cases in rural India, and as such, monopoly profit may exist only in such cases, possibly in the rates charged by say, Pathan money-lenders. It should, however, be remembered that in our discussion of opportunity cost, we did not pay any attention to the idle funds that money-lenders may have during the off-season. The inclusion of any such possibility raises α . It may, perhaps, be argued that if funds are really idle, then six-months bills may be issued to increase short-term investments and this may be a useful device to finance current agricultural operations.

The risk-premium may be higher also because of the anticipation of a price rise and such risk is discussed in the next section.

4.5. 2. Premium for Risk in anticipation of Inflation:

Inflation generally leads to a fall in the value of money and as such during inflation, creditors stand to lose in real terms when they get repayment. The loss of creditors largely depends upon the rate of price rise and the time-lag between loans advanced and repaid. The greater the rate of price rise and larger the lag between loans received and loans repaid, the greater will be the loss of the creditor (or the gains of debtors). The probability of charging higher interest rate to safeguard against the loss of repayment has been observed in South Korea.¹ In the Indian economy, the rise in prices between 1951 and 1967, particularly between 1962 and 1967, was substantial.² In the following section, we shall try to explain the money-lender's interest rate when he anticipates inflation.

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- 1 See, Colin D. Campbell and Chang Shick Ahn, "Kyes and Mujins - Financial Intermediaries in South Korea" in Economic Development and Cultural Change, vol. XI, No. 1. October, 1962, PP. 55-68.
 - 2 See, Santikumar Chakrabarti - The Behaviour of Prices in India, 1952-1966: An Empirical Study: Unpublished Ph.D. thesis submitted to the University of London, 1970.

4.5. 3. Estimation of Interest Rate in periods of Inflation:

Let us assume that R is the expected monetary returns over monetary costs of money-lenders (ie, net monetary income). Let R be the decreasing function of time ($=t$).¹ Implicit is the assumption that as the money-lender will be advancing more money, the rate of return will fall. This will be the case even when there is no inflation. The net return curve is thus:

$$R = f(t) \quad (\text{see, Fig.1V.3})$$

Now if we assume that money-lenders are anticipating inflation, then R will shift downwards to R' (fig.1V.3). Such a shift takes place mainly because of the state of imperfect knowledge and greater uncertainty in the face of the anticipated price rise. Assume now that α is the cost of capital in the absence of inflation. With no inflation, when a future payment is being converted to its present value equivalent, it is discounted at α .² The present value of sum P in n years is given by $P / (1 + \alpha)^n$. If money values are not stable, then discounting P at rate α may not show the present value equivalent of P received in n years. Let prices rise at the rate of g each year. Then the present value of a given sum of money, P , due in n years, when the cost of capital is α is given by

$$\frac{P}{(1+\alpha)^n(1+g)^n} \quad \text{or} \quad \frac{P}{[(1+\alpha)(1+g)]^n}$$

1 See, for example, W.B. Buck and V.G. Hurt, "Decision Processes for Understanding Capital Use and Investment on Farms" in E.L. Baum, H.G. Diesslin and E.O. Heady (eds.) - Capital and Credit Needs in a Changing Agriculture, The Iowa University Press, Ames, 1961, PP. 352-3.
 2 See, A.J. Merrett & Allen Sykes - The Finance and Analysis of Capital Projects. Longmans, London, 1963, PP. 214-5. For a simple illustration of present value and cost of capital, see, A.J. Merrett and Allen Sykes - Capital Budgeting and Company Finance. Longmans, London, 1966, PP. 5 - 7, chs. 3 and 4.

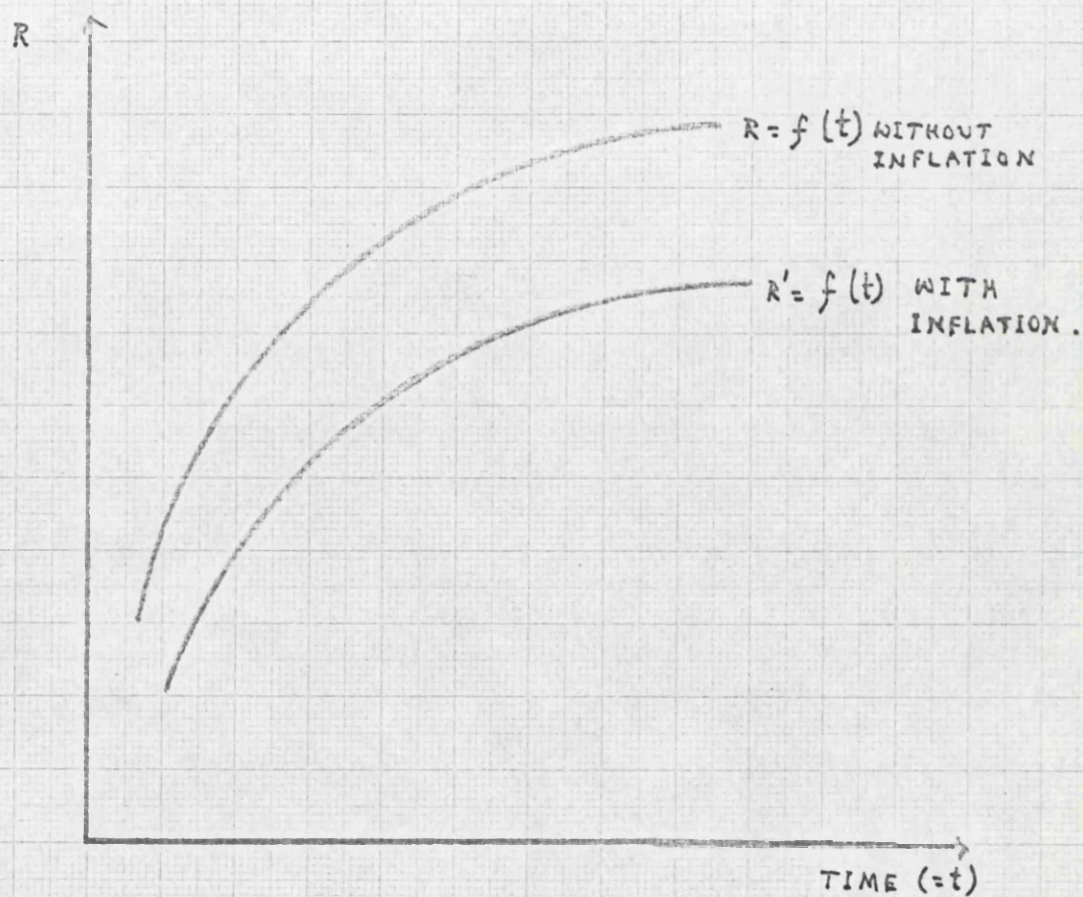


FIGURE IV.3

The cost of capital in money terms, α_i , under inflation at rate g is

$$\alpha_i = (1+\alpha) (1+g) - 1$$

ie, the cost of capital is to be multiplied by the rate of inflation and their product used to discount future payments.

Let $g = 3\%$ and $\alpha = 4\%$. Then the appropriate discount factor is:

$$(1.04 \times 1.03) - 1.0 = 7.12\%$$

If both g and α are low, then nearly the same result would be obtained by adding r to g and thus $4\% + 3\% = 7\%$.

In the Indian context, the assumptions that $g = 3\%$ and $\alpha = 4\%$ may not be very unreasonable as the Bank Rate remained at 4% and prices went up by nearly 30% between 1951 and 1961. If we combine the risk of price rise with the risk of default in repaying loans, then for measuring rural interest rate, we can devise a different formula and by using it to the Indian data, we may try to show Indian rural interest rate where different types of risks are involved.

Thus, we have,

$$\begin{aligned} r_i &= \frac{1+\alpha}{p} - 1 + [(1+\alpha)(1+g) - 1] \\ \text{or } r_i &= \frac{1+.04}{.90} - 1 + [(1.04)(1.03) - 1] \\ &= .1555 + .0712 = .2267 \text{ or } 22.67\% \end{aligned}$$

Where $p = .90$ (ie, proportion of loan repayment)
 $g = .03$ (ie, rate of inflation)
 $\alpha = .04$ (ie, Bank Rate)

It follows, therefore, that the provision for risk-premium for both inflation and default in loan repayment makes the rural interest rate higher than what it would have been with risk of default but without inflation. In the next section, we shall try to discuss other factors which may be responsible for raising interest rates.

4.5. 4. Rural Interest Rate in case of Capital Rationing, Risk and Uncertainty:

The term 'capital rationing' generally implies that the borrower is unable to get all the capital funds which he wishes to obtain at going or possible interest rates.¹ Such a case arises because the lending agency is sensitive to risk.

Capital rationing in agriculture can be both internal and external.²

When the risk aversion on the part of the cultivator himself puts a limit to the use of credit funds, capital rationing is internal. This may occur because of technical or weather conditions. Capital rationing may be external when the lending agency, rather than the borrower, because of technical, technological and price uncertainties restrict the use of funds. The lending agency may have to face other types of uncertainties like the managerial ability and honesty of the farmer. It follows that under uncertainty and capital-rationing, the lender may prefer to lend according to the value of security rather than on the basis of marginal productivity of capital and in case of risk-aversion, i.e., internal capital rationing, the use of capital may be less than the point at which marginal value productivity of credit is equal to marginal cost.

1 See, Earl O. Heady - Economics of Agricultural Production and Resource Use, Prentice Hall, Inc., New York, 1952, P.550 and PP. 550-60.

2 T.W.Schultz - The Economic Organization of Agriculture, McGraw-Hill Book Co., Inc. New York, 1953, P.306. See also, L.F.Hesser, "Conceptual Models of Capital Rationing among Farmers" in Journal of Farm Economics, vol. XLII, No.2. May 1960. PP. 325-34.

For many farms in Indian agriculture, capital rationing can be external, though in some cases, it was observed that risk-aversion may be high because of two reasons:¹ (a) the belief among cultivators that once a person becomes indebted to a private money-lender, his chances of getting rid of debt are very slim; (b) there are strong social and moral stigmas attached to debt which may prevent the cultivator from borrowing as far as possible. If the farmer's uncertainty is reduced, the rural lenders may lend at a lower rate.²

This, of course, assumes that the lenders are risk-aversers. Porter argued that rural lenders should be risk-aversers because they are "one-way" shareholders in the farmer's enterprise - ie, lenders lose if the farmers fail to repay, but gain no greater amount than the agreed interest if the innovation succeeds. However, these lenders may turn into "risk-lovers" if the real profit from lending emanates from compounding interest on previously defaulted borrowings.³

The point of optimum lending by a rural money-lender may be shown in fig. 1V.4. Let us measure the amount of possible returns in the vertical axis and the range of outcomes ie, uncertainty or possible magnitudes of loss in the horizontal axis. AP indicates the opportunity possibility curve. Where the money-lender lends nothing, the prospective return is nil and the chance of loss is also nil.

1 See, S.Thirumalai, *op cit.*, P.106. See also, B.P.Dutia, "Uncertainty, Capital Use and Firm Household Relationship" in *The Indian Economic Journal*, Vol.VIII, No.4, April, 1961, PP. 338-9. Also Gopal Karkal, *op.cit.*, P.85.

2 See, Richard C.Porter, "Risk, Incentive and Technique of Low Income Farmer" in *The Indian Economic Journal*, vol.VII, No.1. July, 1959, PP.1-27.

3 *Ibid.* P.13. See also fn. 21.

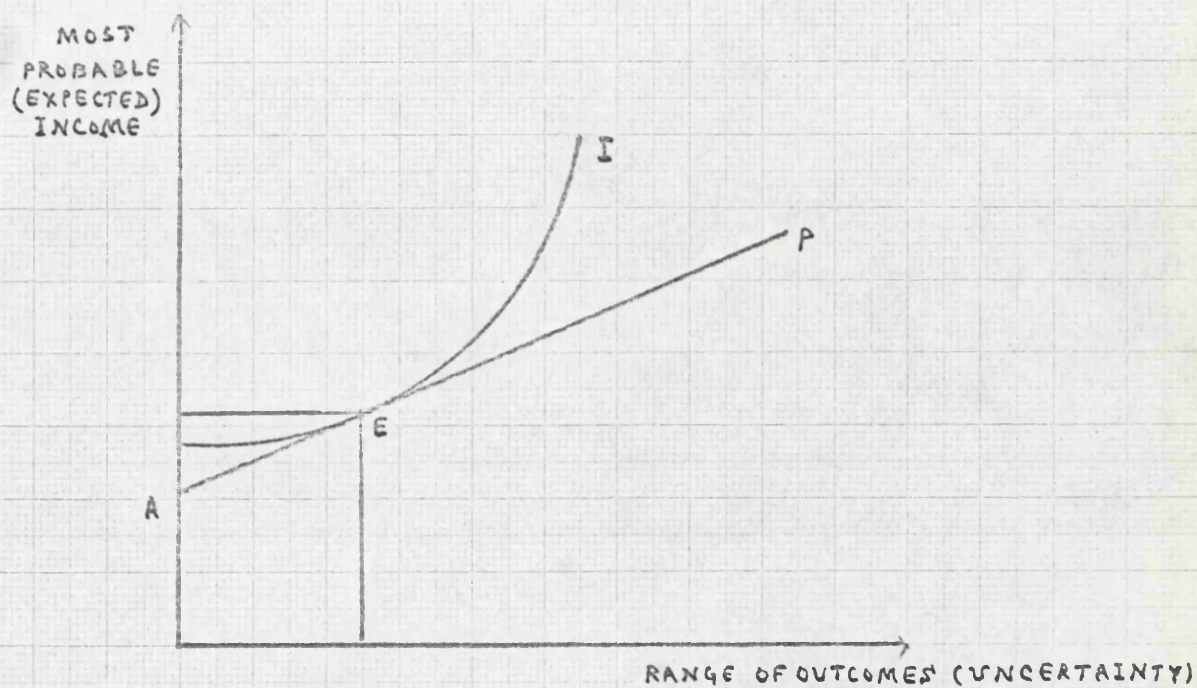


FIGURE IV.4.

Such a state implies absence of uncertainty. Let I be the indifference curve of the money-lender and it slopes upwards, showing that the money-lender is willing to assume greater uncertainty only if the income prospects are sufficiently large. AP could start from the point of origin if there is no alternative use of funds. But it originates at some point like A in the positive scale of the vertical axis since it is assumed here that the money-lender may have alternative use of funds as they can deposit money either in Post-Offices or in co-operative banks. AP slopes upward as it is assumed that most probable returns are greater than certain alternatives. If the reverse is true, the curve will slope downwards. The money-lender must choose between greater and smaller investments involving more or less uncertainty.

The theoretical equilibrium is attained at a point like E where the indifference curve is tangent to the opportunity line as the lender maximises expected utility. Lending beyond E is ruled out because (a) increasingly higher amounts of prospective incomes are required on I curve to make the lender willing to undertake greater risk while the most probable expected income (on the AP line) does not rise at a rate large enough to compensate for greater uncertainty.

Theoretically, the effect of uncertainty on the interest rate, may be stated in the following way. Let MVP be the 'most probable expected' marginal rate of profit curve out of money investment by the lender, (fig IV.5). Let interest rate by r_i , and let the money-lender add a discount (at a constant rate) in the face of uncertainty to interest rate.

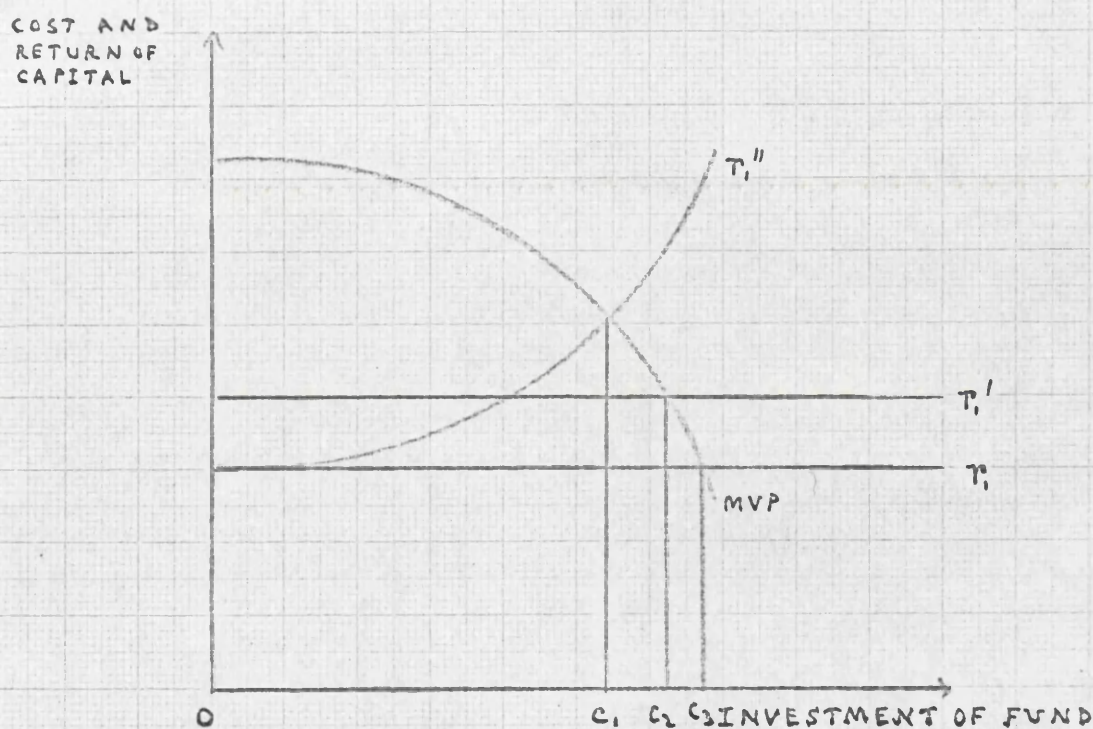


FIGURE IV.5

The discounted marginal cost of capital then becomes r'_1 . Equilibrium may not be obtained if the MVP of capital is greater than the discounted marginal cost of capital throughout. But if the money-lender considers greater lending with greater risk then a rising discount rate may be added to r_1 and the discounted cost of capital becomes r''_1 . The amount of discount and the increasing rate of discount are shown by the distance between r'_1 and r''_1 respectively. The MVP is subject to diminishing returns and r'_1 is subject to increasing rate of discount. Under certainty, use of capital = OC_3 . With a constant rate of discount, it is OC_2 and with an increasing rate of discount under uncertainty, it is equal to OC_1 .¹ Hence the expectation of rising risk connected with larger investment may restrict the use of capital by the lender and such a situation may also occur when the borrower invests the loaned funds.² A restriction of lending with same demand raises interest rates. Here external capital rationing is not matched by internal capital rationing. Where both external and internal capital rationing operate, the extent to which interest rate will rise depends upon the relative shifts of the demand for and supply of loanable funds curves. Failure of the interest rate to clear the market of all willing borrowers, ie, credit rationing or fringe of unsatisfied borrowers, stems from the difference in the viewpoints from which lenders and borrowers assess any investment project. Generally, the lender views any project with less enthusiasm than the borrower for the following reasons:³

1 See, for example, Earl.O.Heady, op cit., P.345. There is, however, a distinction between risk and uncertainty. While risk is insurable, uncertainty is not.

2 See, Hira Singh - 'Role of Agricultural Credit in Economic Development of Indian Agriculture', Unpublished Thesis submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy(Agricultural Economics) at the University of Wisconsin, U.S.A. 1964, PP.204 - 211.

3 See, A.J.L.Catt, " 'Credit Rationing' and the Keynesian Model" in The Economic Journal. vol.LXXV, June, 1965, PP. 358-9.

(a) Since the lender knows less about the project than the borrower, therefore, the lender will be inclined to subtract a greater risk-premium from the yield.

(b) The lender generally charges additional risk-premium because of the possible dishonesty or incompetence of the borrower.

(c) While the borrower has a personal interest in the project apart from the profit motive, the lender views the transaction as a cold comparison of expected return on his money against the risk involved and other alternative returns. However, an individual lender may be a greater risk-averter than an institution simply because such a lender may find it more expensive and troublesome than an institution to get the repayment and also because a given loan generally represents a greater proportion of an individual's assets in comparison with the assets of an institution.¹

Nonetheless, neither an institution, nor an individual money-lender could charge the highest possible interest rates continuously after assessing and allowing for risks and uncertainties because of the fear of government intervention or of public opinion. Such intervention in the Indian case has been demonstrated several times in the enactment of money-lending legislations which sought to control money-lenders' interest rates though without much success. Credit rationing may also be associated with a whole range of interest rates. "As a result, for each borrowing operation there is one particular rate of interest, which is the Relevant Rate of Interest..."² However, the main purpose of our exercise in this section is to underline the possibility of credit-rationing by Indian money-lenders, which might raise interest rate by reducing the supply of credit.

1 Ibid. PP. 360-1.

2 See, J.S.G. Wilson, "Credit Rationing and the Relevant Rate of Interest" in Economica, vol. XX1, No. 81. Feb. 1954. P. 21.

4.6. 1. A Simple Model for determining Interest Rate in the Indian Rural Economy:

In this section, we shall try to build up a model for determining an equilibrium rural interest rate in the Indian economy. Specifically, we postulate the following functional relationships:

$$\begin{aligned} R &= f(Y) && \dots\dots(1) \\ Y &= \bar{Y} && \dots\dots(2) \\ r &= g(\bar{Y}) && \dots\dots(3) \\ r &= \psi(R) && \dots\dots(4) \end{aligned}$$

Where R = Repayment by the cultivators.
 Y = Farmers income.
 \bar{Y} = Output of the cultivators.
 r = Rural rate of interest.

Actually, equation (2) is an identity which is valid when price is constant. Hence we are left with 3 equations and 3 unknowns and the system is determinate.

Geometrically, the model may be presented in a simple way (see fig.IV.6). In the 1st quadrant, (ie, North-east), we have $R = f(Y)$. The curve slopes upwards because it is assumed that the greater the amount of income the greater is the repayment by the farmer. In quadrant II (ie, South-east), the identity between income and output is shown by the 45° line. In the third quadrant (ie, South-west), the rate of interest is shown as a negative function of output and in quadrant IV (ie, North-west) the interest rate is shown as an inverse function of repayment. In the next section, we shall try to make an empirical test of the assumptions behind the assumed functional relationships.

In figure IV.6. it is shown how, when income rises, output rises, repayment rises and interest falls. Equilibrium interest rate is achieved at r_0 interest rate with income at Y_0 , output at \bar{Y}_0 and repayment at R_0 .

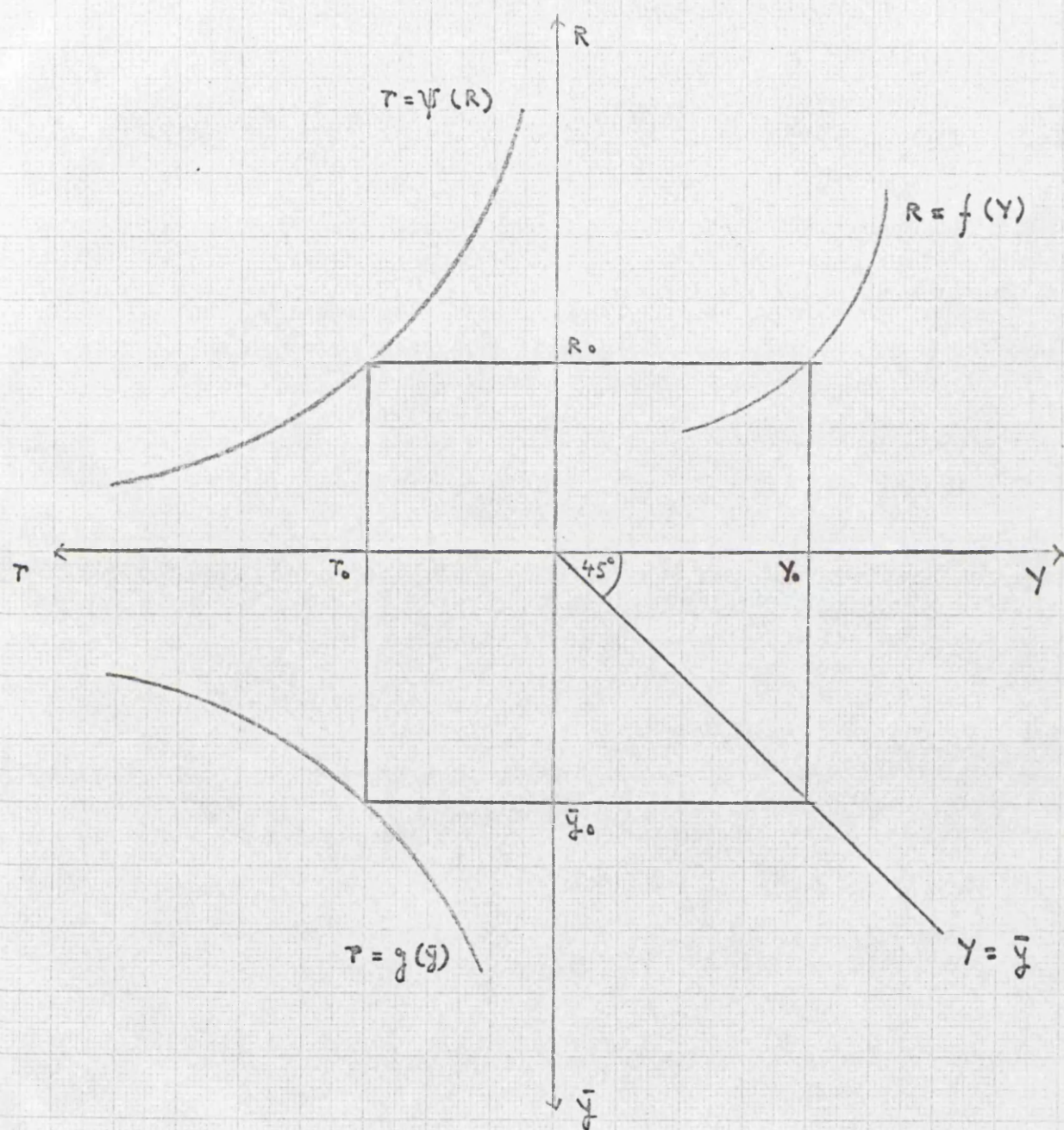


FIGURE IV.6

4.6. 2. An Empirical Test of the Theoretical Model:

In this section, we shall empirically test the assumptions which were made in formulating the functional relationships in the previous section. We carried out a few regression analyses with the relevant variables that we introduced in our model. We have stated the results of our empirical investigations in the adjacent table. We have applied the following simple linear equation to test the validity of our assumptions:

$$Y = \beta_1 + \beta_2 X_2^1$$

From the table (4.3.) it is clear that our assumptions about the type of relationships between the different dependent and explanatory variables are broadly confirmed by the empirical tests. Repayment is significantly correlated with income in a positive way in all the cases we have considered. Interest rate is inversely related to repayment and in one of the two cases we have considered, the relationship is fairly significant. In the other case, ie, (4) in the table, the relationship is significant at 5% level, but $R^2 = .36$. The weak part of our empirical test is the relationship between interest rates charged by professional money-lenders and cash-income. In equation (6) such a relationship is not significant statistically, though the negative sign of the co-efficient broadly justifies our assumption about the inverse relationship between interest rate and cash-income. However, in equation (7), where the same data are tested with the exclusion of Bihar - Bengal and Western Uttar Pradesh, the result becomes highly significant.

1 For an explanation of these symbols, see table 4.3, p.147.

TABLE 4.3 EMPIRICAL TEST OF THE THEORETICAL MODEL ON RURAL INTEREST RATE

Y	β_1	β_2	X ₂	R ²	F	D.F.	D.W.
(1) Repaying Capacity (a)	-3767.9976	.9184 (.0692)	Net family Income	.93	138.77*	10	1.52
(2) Repaying Capacity (a)	-3873.6623	.5318 (.0538)	Farm Income	.91	97.63*	10	1.37
(3) Repayment of Loans (b)	-281.3488	.5218 (.1916)	Average income per cultivating family	.51	7.41 ⁺	7	1.56
(4) Interest Rate (c)	21.6967	-.1660 (.0734)	Repayment as prop- ortion of borrowing	.36	5.12 ⁺	9	.83
(5) Interest rate (c)	25.0463	-.0343 (.0086)	Average repayment per family	.64	16.07 ⁹	9	1.51
(6) Interest rate of professional moneylenders (d)	30.9793	-.0236 (.0114)	Cash Income	.30	4.33**	10	1.68
(7) Interest rate of professional moneylenders (e)	38.9594	-.0409 (.0077)	Cash Income	.80	28.35*	7	1.59

Note: Figures in parentheses show standard errors of β_i coefficients.

TABLE 4.3 (continued) EMPIRICAL TEST OF THE THEORETICAL MODEL ON RURAL INTEREST RATE.

- Sources: (a) Reserve Bank of India - Financing of Agriculture by Commercial Banks, pp. 200-201, Bombay, 1969.
- (b) Reserve Bank of India - Rural Credit Follow-up Survey : 1959-60, p. 19 and p. 61, Bombay, 1962.
- (c) Reserve Bank of India - Rural Credit Follow-up Survey : 1956-7, p. 110 and pp. 137-138, Bombay, 1960
- (d) Reserve Bank of India - A.I.R.C.S., Vol. I, pt. 1, p. 862 and Vol. I pt. 2, p. 597, op.cit.
- (e) Same as in (d) excluding Bihar-Bengal and Western Uttar Pradesh. High proportion of borrowing from relatives was reported in these states - relatives who did not charge any interest rate.

* Highly significant. ** Insignificant.

+ Significant at 5% level.

♀ Significant at 5% and 1% level but not at 0.1% level.

The reason for excluding Bihar - Bengal and Western Uttar Pradesh is that in those provinces, a fairly high proportion of borrowing took place from relatives who did not charge any interest at all. Such empirical tests are by no means enough; but they may reasonably be regarded as some partial indicators of the direction of the relationships of the different variables considered in our model. It is sometimes argued that high interest rates in underdeveloped countries including India may be caused by excess demand for credit. This may be true but in the absence of fairly authentic data, it is extremely difficult to measure precisely the demand for and supply of credit. There are also considerable difficulties in measuring the supply of credit by unorganized agencies to cultivators.

4.7. 1. Monetization and the Rate of Interest:

The nature of the peasant economy may sometimes influence the interest rate. It is possible to indentify different rates in different parts of a country like India and such differences may partly be due to the different degrees of monetization and commercialization of the economy. Monetization (= K) is defined here as the ratio of 'monetary transactions' (= M) to total transactions (= T) ie,

$$K = \frac{M}{T} \quad \dots (a)$$

However, monetization may also be measured from the input side as the ratio of total monetary expenditure to total expenditure on all inputs. From the side of output, it is the ratio of cash income to total income. In the following section, we shall examine whether such monetization in the Indian rural economy, defined as in (a) above, might have any relationship with the rate of interest.

4.7. 2. Monetization in Indian Rural Economy and Interest Rates:

In the A.I.R.C.S. seventy five districts surveyed were classified according to the type of economy and three major classifications were made: (a) subsistence; (b) monetized (but not commercialized); (c) commercialized and monetized;¹ The other classification is related to the range of interest rates charged by private credit agencies. The index for this purpose was, for each district, the proportion which the volume of borrowings at 18% or more bears to the total volume of borrowings. The 75 districts were arranged in descending order of magnitude of these proportions and then divided into five equal groups of fifteen each, as shown in the table. Using Spearman's rank correlation co-efficient,

ρ

Where

$$\rho = 1 - \frac{6 \sum d^2}{N(N^2 - 1)}$$

rank correlation between the interest rate and the number of subsistence districts is $\rho = + 1.0$.

Between monetized areas and the rate of interest,

$$\rho = - .40,$$

and between commercialized areas and interest rate, $\rho = -.902$.

Our results are broadly similar to those obtained by Sengupta.²

The results of our study lead to the conclusion that in highly monetized and commercialized districts surveyed, the rate of interest was significantly low and in highly subsistence districts, interest rates tended to be high. However, the degree of monetization may not depend upon the level of interest rates.³

1 See, R.B.I. - A.I.R.C.S. vol.11. PP. 190-196, op cit.,

2 See, J.K.Sengupta, "Role of Monetisation in Agriculture" in Indian Journal of Agricultural Economics. Vol.XII, No.4.Oct-Dec,1957.PP.28-9

3 "While empirically a negative association exists in intercountry comparison between monetization ratio and interest rate level, one could not claim monetization depends on the level of interest rates. The causal relationship, if any, rather runs in the opposite direction the process of monetization tending to decrease the level of interest rates as a capital market develops". Raymond.W.Goldsmith - Financial Structure and Development, Yale University Press, 1969, P.93.

TABLE 4.4 INTEREST-RATE DISTRICT GROUPS

Groups	Where the level of Interest Rate Was	Number of districts in the Group	Proportion of borrowing at rates of 18% or more to the total borrowings from the principal private credit agencies. Per Cent.
Group I	Very High	15	93.7
Group II	High	15	77.0
Group III	Medium	15	54.3
Group IV	Low	15	23.4
Group V	Very Low	15	3.9

Groups	Where the level of Interest Rate Was	Number of villages in subsistence areas	Number of villages monetized in areas	Number of villages in monetized and commercialized areas
Group I	Very High	10	5	0
Group II	High	9	4	2
Group III	Medium	7	5	3
Group IV	Low	1	6	8
Group V	Very Low	0	8	7

Source: Reserve Bank of India - A.I.R.C.S., Vol. II, pp. 194-196, op.cit.

4.8. 1. Relationship between Bazaar bill rates and Co-operative Rates:

The study of interest rates in the Indian rural economy is not fully comprehensive if we do not examine the relationship between rates prevailing in the organized sector, and the rates prevailing in the Bazaar section of the Indian money market. The Bazaar rate is "the rate at which the bills of small traders are discounted by the shroffs".¹ Firstly, we shall try to test statistically the relationship between the Bazaar bill rate and rates charged by primary agricultural co-operative credit societies. The result is shown in the following equation.²

$$\begin{array}{llll} \text{Baz} = 9.8711 + 0.1516 \text{ CR} & R^2 = .037 \\ (.2136) \text{ DW}=.32: & \text{D.F.} = 13 \\ & F = .50 \end{array}$$

Where Baz = Bazaar bill rate.

CR = rates charged by primary agricultural co-operative credit societies.

The result shows poor correlation and unreliability of the estimate of the co-efficient of CR in view of its high S.E. The low D.W. statistic also signifies the presence of auto-correlation. This need not be surprising in view of the fact that the Bazaar section of Indian money market is not very dependent upon primary agricultural credit co-operatives for funds.

1 L.C. Jain, op.cit., P. 97. Shroff means indigenous banker.

2 Data for the years 1953 we have taken from R.B.I. Reports on Currency and Finance, 1952-3 to 1967-8, Bombay, and R.B.I. - Statistical Statements relating to the Co-operative Movement in India, 1952-3 to 1967-8.

4.8. 2. Bazaar bill rate and Hundi rate:

It would be interesting also to know the relationship between Bazaar bill rates and hundi rates, i.e., the rate at which the State Bank or other commercial banks discount hundis for giving accommodation to the indigenous banks up to a certain limit.¹

By using the relevant data,² we obtain the following equation:

$$\begin{array}{rclcl} \text{Baz} & = & 6.6264 + .7899 \text{ HR} & R^2 & = .90 \\ & & (.0724) & \text{D.F.} & = 13 \\ & & \text{D.W.} = 1.54. & \text{F.} & = 119.0 \end{array}$$

Where HR = Hundi rate.

Thus 90% of the total variation in Bazaar bill rate is explained by hundi rate and the correlation between them appears to be highly significant.

4.8. 3. Bazaar rate and Bank Rate: an analysis of the relative discrepancy of the two rates:

It is useful to examine the nature and change in the discrepancies between Bank Rate and Bazaar Rate on a time-series basis. In 1949-50, when the Bank Rate was 3% p.a. Bazaar bill rate in Bombay was roughly equal to 8% p.a. and in Calcutta, it was about 12% p.a. In 1966-7, when Bank Rate was 6%, Bazaar bill rate in both Calcutta and Bombay was equal to 15% p.a. It follows that while Bank Rate went up by 100% between 1949 and 1967, Bazaar rate in Bombay went up by 87.5% and in Calcutta, it went up by only 25%.

1 See, Gopal Karkal, on cit., PP. 67 - 8.

2 See, R.B.I. - Report on Currency and Finance: 1952-3 to 1967-8 and R.B.I. - Statistical Statements relating to the Co-operative Movement in India: 1952-3 to 1967-8.

This implied that the relative difference between Calcutta Bazaar rate and Bank Rate decreased substantially though such decrease in difference was small so far as Bank Rate and Bombay Bazaar rates are concerned. However, the difference between the hundi rate and Bank Rate increased considerably during the same period since the hundi rate went up by 178% whereas Bank Rate went up by 100%. Such estimates also suggest that the difference between the hundi rate and Bazaar rate is gradually narrowing. The interesting fact to observe is that during 1948-50, Bombay Bazaar rates were lower than those in Calcutta which perhaps implies inter alia, the absence of the flow of funds between these two important money markets as also the presence of a weak communication channel in India. Such difference may also be explained by the high cost of transfer and variations in risk.¹

However, in 1966-7, rates in both the markets were the same and indeed, in 1967-9, the rate in Calcutta was actually lower than that in Bombay.² This may imply an improvement in the channels of communication and a greater flow of funds between the two markets. It may also imply a change in conditions in Calcutta or in Bombay without an improvement in the channels of communication. ✓

1 See, J.S.G.Wilson - Monetary Policy and the Development of....IP
PP. 266-69, op cit.,

2 See table 4.5.

TABLE 4.5 BANK RATE, HUNDI RATE AND BAZAAR BILL RATE IN INDIA (Percent per annum)

Years	BANK RATE	HUNDI RATE		BAZAAR BILL RATE		CALCUTTA	
		Highest	Lowest	BOMBAY Highest	Lowest	Highest	Lowest
1938-39	3		3	$5\frac{5}{8}$ Apr.-Feb.	3 Oct.	8 Apr.-June	6 July-Mar.
1945-46	3		3	$5\frac{1}{4}$		7	6
1950-51	3	4 Jan.-Mar.	$3\frac{1}{2}$ Apr.-Jan.	9 Jan.-Mar.	$8\frac{1}{4}$ Apr.-Jan.		10-12
1951-52	$3\frac{1}{2}$	$4\frac{1}{2}$ Nov.-Mar.	4 Apr.-Nov.	9			10-12
1952-53	$3\frac{1}{2}$		4	$9\frac{3}{4}$ July-Jan.	9 Apr.-July		10-12
1953-54	$3\frac{1}{2}$		$4\frac{1}{2}$	$9\frac{3}{4}$ Dec.-Mar.	$8\frac{5}{8}$ Aug.-Sept.		10-12
1954-55	$3\frac{1}{2}$		$4\frac{1}{2}$	$9\frac{3}{4}$			10-12
1955-56	$3\frac{1}{2}$		5- $4\frac{1}{2}$	$10\frac{1}{6}$ Mar.	$9\frac{3}{4}$ Apr.-Mar.		10-12
1956-57	$3\frac{1}{2}$		$5\frac{1}{4}$ -5	$11\frac{1}{4}$	9	11-12	10-12
1957-58	$3\frac{1}{2}$		$5\frac{1}{2}$ - $5\frac{1}{4}$	$11\frac{1}{4}$	$9\frac{3}{4}$	12	11-12
1959-59	4		$5\frac{1}{2}$ - $5\frac{1}{4}$	$8\frac{1}{4}$ -10%			9- $11\frac{1}{4}$
1959-60	4		$5\frac{1}{4}$	$11\frac{1}{4}$	9	$10\frac{1}{2}$	9

TABLE 4.5 (continued) BANK RATE, HUNDI RATE AND BAZAAR BILL RATE IN INDIA (Percent per annum)

Years	BANK RATE	HUNDI RATE		BOMBAY		BAZAAR BILL RATE		CALCUTTA	
		Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
1960-61	4	5 $\frac{1}{4}$ -6 $\frac{1}{2}$		12	9	13	9 $\frac{1}{2}$		
1961-62	4	6 $\frac{1}{2}$		12	10 $\frac{1}{2}$	13 $\frac{1}{2}$	12 $\frac{1}{2}$		
1962-63	4-4 $\frac{1}{2}$	6 $\frac{1}{2}$ -7		12	10 $\frac{1}{2}$	13	12 $\frac{1}{2}$		
1963-64	4 $\frac{1}{2}$	7 $\frac{1}{4}$			12		13		
1964-65	4 $\frac{1}{2}$ -6	7 $\frac{1}{4}$ -9 $\frac{1}{4}$			12	15	13		
1965-66	6	9 $\frac{1}{4}$ -9 $\frac{3}{4}$		15	12		15		
1966-67	6	9 $\frac{3}{4}$			15		15		
1967-68	6-5	9 $\frac{3}{4}$ -9 $\frac{1}{2}$			15	15	13 $\frac{1}{2}$		

Source: RBI - Reports on Currency and Finance : 1950-51 - 1967-68, Bombay

4.8. 4. A Statistical Estimate of the relationship between the Bank Rate and the Bazaar rate:

The statistical estimate of the various factors expected to affect the Bazaar rate in India has yielded the following equation with Koyck transformation when applied to data available for period 1945 - 1968. Data of Bazaar rates are average of Calcutta and Bombay rates- (see table 4.5):

$$\text{BAZt} = 2.2884 + .0484 \text{BANt} + 1.4239 \text{BANT-1} + .2115 \text{BANT-2} + .2087 \text{BAZt-1}$$

$$(1.1659) \quad (.7020) \quad (.7325) \quad (.3136) \quad (.2383)$$

$$t = \quad [1.96] \quad [.07] \quad [1.94] \quad [.67] \quad [.88]$$

$$\bar{R}^2 = .8314$$

$$\text{D.W.} = 1.84$$

BAZt = Current Bazaar rate.
 BAZt-1 = Lagged Bazaar rate of one period.
 BANt = Current Bank Rate.
 BANT-1 = Lagged(one period)Bank Rate.
 BANT-2 = Lagged(two period)Bank Rate.

*July.
Calcutta & Bombay*

In the above equation, we find that given the t-values, only BANT-1 has significance at 10% level whereas the other variables are insignificant.

The OLS regression consisting only of BANT-1 and BAZt-1 as the explanatory variables yielded the following equation:

$$\text{BAZt} = 1.8154 + 1.4806 \text{BANT-1} + .3206 \text{BAZt-1}$$

$$(.8895) \quad (.3768) \quad (.1545) \quad \bar{R}^2 = .8450$$

$$t = [2.04] \quad [3.93] \quad [2.08] \quad \text{D.W.} = 1.9693$$

The above equation shows not only higher \bar{R}^2 but also higher D.W. statistic which reduces the chance of existence of auto-correlation. From the t-values, it appeared that BANT-1 is more significant than BAZt-1. The equation also shows that the effect of one period lagged Bank Rate on Bazaar rate is quite significant.

With Bank Rate as the dependent variable, we obtained the following equation:

$$\begin{aligned} \text{BANT} &= .0075 - .0091 \text{BAZt} + .0496 \text{BAZt-1} + .0102 \text{BAZt-2} + .8927 \text{BANT-1} \\ &\quad (.3922) \quad (.0849) \quad (.0777) \quad (.0333) \quad (.1891) \\ t &= \quad [.02] \quad [-.11] \quad [.64] \quad [.31] \quad [4.72] \\ \bar{R}^2 &= .8954: \quad \text{D.W.} = 1.1679 \end{aligned}$$

The above equation shows that only BANT-1 has a significant effect upon the Bank Rate while Bazaar rates of different periods did not have any significant effect. However, low value of D.W. statistic signifies that auto-correlation might exist in the estimates.

As a cross-check, we used monthly data from 1964 to 1965 (see, fig.IV.7) and obtained the following equation¹ which is similar to the preceding equation but with improved D.W. statistic. However, in this equation only the relationship between Calcutta Bazaar rate and Bank Rate is considered:

$$\begin{aligned} \text{BANT} &= .0489 + .2112 \text{BAZt} - .0952 \text{BAZt-1} + .0081 \text{BAZt-2} + .6973 \text{BANT-1} \\ &\quad (.0585) \quad (.1222) \quad (.1491) \quad (.0058) \quad (.1285) \\ t &= \quad [-.84] \quad [1.73] \quad [-.64] \quad [1.39] \quad [5.43] \\ \bar{R}^2 &= .9975 \quad \text{D.W.} = 1.4736 \end{aligned}$$

The equation shows once again that only BANT-1 had significant effect on BANT and Bazaar rates in different periods did not have any significant effect upon current Bank Rate.

From these equations, it may perhaps be inferred that although the Bazaar rate was affected by a lagged Bank Rate, Bank Rate was not significantly affected by Bazaar rates in different periods during the span of our study. The inference may be regarded as important as it indicates to a certain extent that it is more likely that the unorganized market was influenced by the organized market and not the other way round. However, it is probable that the effect was not instantaneous.

¹ Data are shown in table 4.6. Since there was no variation in Bombay Bazaar rate, therefore only the Calcutta Baz. rate is considered.

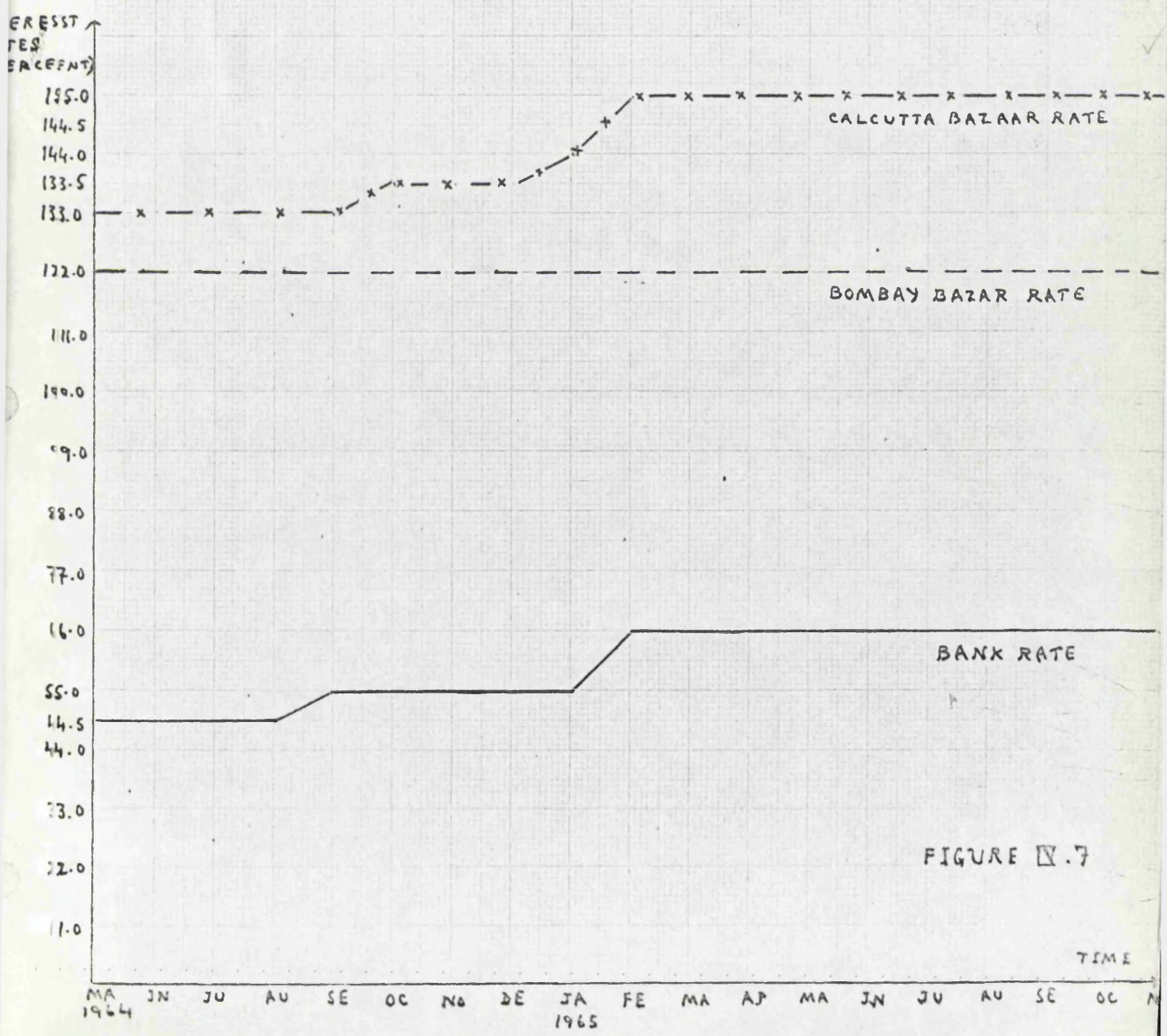


FIGURE 1.7

TABLE 4.6: BANK RATE AND CALCUTTA AND BOMBAY BAZAAR RATE:

MAY 1964 - 1965 NOVEMBER

PER CENT.

MONTH AND YEAR	BANK RATE	CALCUTTA BAZAAR RATE	BOMBAY BAZAAR RATE
1964			
MAY	4.5	13.0	12.0
JUNE	4.5	13.0	12.0
JULY	4.5	13.0	12.0
AUGUST	4.5	13.0	12.0
SEPTEMBER	4.5-5.0	13.0	12.0
OCTOBER	5.0	13.5	12.0
NOVEMBER	5.0	13.5	12.0
DECEMBER	5.0	13.5	12.0
1965			
JANUARY	5.0	14.0	12.0
FEBRUARY	5.0-6.0	15.0	12.0
MARCH	6.0	15.0	12.0
APRIL	6.0	15.0	12.0
MAY	6.0	15.0	12.0
JUNE	6.0	15.0	12.0
JULY	6.0	15.0	12.0
AUGUST	6.0	15.0	12.0
SEPTEMBER	6.0	15.0	12.0
OCTOBER	6.0	15.0	12.0
NOVEMBER	6.0	15.0	12.0

Source: Reserve Bank of India Bulletin, 1964 June to January, 1966.

4.9. Institutional Aspect of Interest Rate in Indian Rural Economy:

Economic and monetary transactions in a subsistence economy are sometimes mingled with social or institutional relationships. Joan Robinson once observed: "The most important influences upon interest rates which account for, say, the difference between 30 per cent in an Indian village and 3 per cent in London - are social, legal and institutional".¹ It has been argued that an explanation of the causes and of the price of borrowing in a rural economy requires anthropological investigations. To quote: "For ultimately the reasons for borrowing, the efficacy of the communication process, the role of valuation, the objectives of productive activity and the associated relationships in the village are outcomes of the village culture. Only a better understanding of village culture and, more particularly, of the role of production and its related processes within the village culture can provide the insights by which a closer meaning of data collected in an economic survey can be evaluated!"²

1 See, Joan Robinson - The Rate of Interest and Other Essays. McMillan & Co., Ltd. London, 1952, P.3.

2 See, Bert.F.Hoselitz, "Capital Formation, Saving & Credit in Indian Agricultural Society" in Raymond Firth and B.S.Yamey.(ed). Capital, Saving and Credit in Peasant Societies. Studies from Asia, Oceania, The Caribbean and Middle America, George Allen and Unwin, Ltd., London, 1964, P.373.

To quote another writer: "Interest may not be native to the village community. There are many cases of time transactions that involve no interest, such as reciprocal help, advances of seed or seedlings to fellow-villagers, temporary loans of cattle and holdings, all of which must be regarded as credit without interest. It is probable, however, that beside these transactions, there are also spontaneous occurrences of interest in kind, while undoubtedly capitalistic western influences have strongly encouraged the levy of interest in the village society".¹ These studies reflect that the problem of interest rate determination of rural areas in a country like India cannot be tackled from the economic standpoint and hence sociological and anthropological surveys are also necessary.²

Without denying the necessity of such investigations, it must be pointed out that in such studies due emphasis should be given on the quantification of ideas expressed in the surveys as far as possible. Otherwise, serious difficulty may occur in the measurement of various causal factors and also in testing the hypotheses.

1 See, J.H.Boeke - Economics and Economic Policy of Dual Societies. H.D. Tjeenk Willink & Zoon N.V., Haarlem, 1953, PP 47-51.

2 See, F.G.Bailey - Caste & the Economic Frontier: a village in highland Orissa, Manchester University Press, 1957, PP.155-6. Bailey observed: "The rate of interest from time to time...is 50 per cent,. If seed paddy is borrowed, the rate is 100 per cent. These high rates are the means by which those who have no land or little land are able to build up a paddy-lending business". (PP. 155-6).

4.10. Conclusions:

The following conclusions may be reached on the basis of our study of Indian rural interest rates:

(a) The idea that interest rates are always very high and usurious in the Indian rural economy is not found to be generally valid on the basis of our study. It may be regarded as significant if taken along with a whole range of other factors in the rural sector(e.g. high rent, malpractices of traders etc.) The average rate of borrowing varied between 17%(approx) in 1951-2 and 15% (approx) in 1961-2. This may not be regarded as very high in the rural sector. Nevertheless, the possibility of charging high interest rate in some cases is not denied in our study. In view of the fact that price level went up by 30 per cent between 1951-2 and 1961-2, the fall in the real rate during the same period was higher.

(b) The examination of the cost side of rural rate revealed that such rates may mostly be explained with the help of high risk and uncertainty. High risks prevail in rural lending mostly because of the inability of cultivators to provide suitable collateral. It is also suggested here that monopoly profit may exist only in some cases.

(c) The hypotheses that the farmers' repayment of borrowing is related positively to farmers' income and that interest rate is inversely related to income are empirically vindicated within the limits of the availability of data. However, there is scope for further enquiry in this line.

(d) The level of interest rates seemed to have been negatively correlated with the degree of monetization in the Indian rural economy.

(e) The relative difference between Bank Rate and Bazaar rate in Calcutta seems to have declined over-time though this decline does not seem to be significant so far as the relative difference between Bank Rate and Bombay Bazaar rate is concerned. The relative difference between the hundi rate and the Bazaar rate in both Bombay and Calcutta appeared to have declined significantly.

(f) The difference between Calcutta and Bombay Bazaar rates had completely vanished by 1966-7 though in 1948-50, rates in Calcutta were higher in comparison, with those in Bombay. This may suggest, inter alia, greater flow of funds between the two markets. It may also imply a change in the economic condition in Calcutta or Bombay.

(g) The econometric study of the relationship between the Bazaar rate and the Bank Rate indicated that it was more probable that Bazaar rate was influenced by the Bank Rate of one period lag while the Bank Rate was more significantly influenced by its past values rather than by Bazaar rates (current or lagged). Thus, there seems to be some ground to argue that rates in the organized sector influences rates in the unorganized sector and it is more likely that the Bank Rate is the leader rather than the follower.

(h) It appeared that although the average rural interest rate in India is not excessively high, there is no reason why it could not be lowered more particularly in those regions where rates are exorbitant. The basic problem here is to enable the peasant to raise his farm output by providing him with more inputs and if necessary, by providing credit in kind.¹

¹ It is well observed that low interest rate was not enough to eliminate the unorganized agencies by making the organized agencies more attractive to the farmers and the cultivators may require services even more than money. See, FAO of the United Nations: FAO Agricultural Studies No:68-Agricultural Credit Through Co-operatives and Other Institutions, Rome, 1965, P.17 and P.76.

Increase in farmer's income will help him to accumulate assets which may be used as collateral for taking further loans. This would reduce the risk-premium and the monopoly element wherever it exists, which in its turn may reduce the rural interest rate. A diversification of the nature of farmer's security may also reduce the risk-premium and thus, the rural interest rate. A number of measures for safeguarding against risk, e.g. diversification of crops, a multiple cropping system, crop insurance, proper grading and storing facilities for crops, provision of warehousing facilities and certainly providing better irrigation facilities, seeds, manures, and fertilizers, could be adopted and some of them are adopted especially in the Intensive Area District Programmes and Intensive Agricultural Area projects. There may remain a case for raising interest rates in the organized sector as "the maintenance of nominal interest rates in the organized sector below their true economic level results in a steady attrition of organized finance",¹ because "only the rates in the organized sector are controlled, the rise in real rates of interest will be confined to the unorganized sectors, resulting in a steady diversion of savings to that sector in search of higher rates of return".² It is believed that raising interest rates in the organized market will "promote financial intermediation and the integration of money and capital market".³ However, it seems fair to conclude that unless the income and asset position of farmers improve appreciably, not only will the high risk-premium and monopoly profit element continue to make the rural rate higher, but also the farmers' capacity to turn to alternative organized agencies will remain limited and the task of integration between organized and unorganized money markets in India may continue to remain difficult.

1 See, for details, Anand. G. Chandavarkar, op.cit., IMF Staff Paper, March 1971, P. 72.

2 Ibid. P. 72.

3 Ibid. P. 72.

PROGRESS OF AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES IN
THE INDIAN RURAL ECONOMY:

5.1. INTRODUCTION:

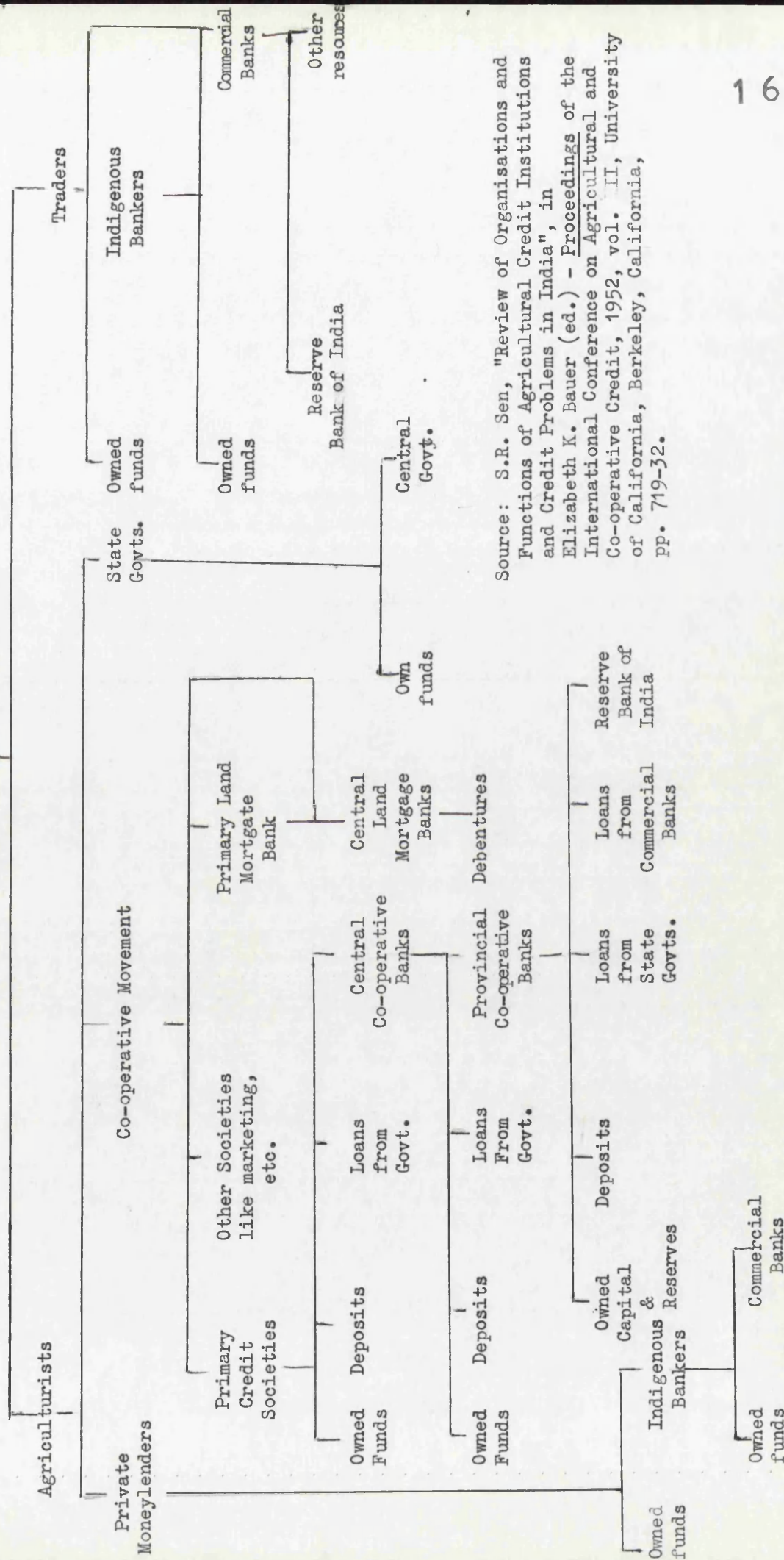
The aim of this chapter is to examine the nature and growth of the co-operative credit societies in the Indian rural economy. The choice of the analysis of co-operative credit societies is deliberate because a) they are the most important organized agencies in the rural sector, and b) they have been recognised as the main agencies to act as substitutes for the money-lenders and to promote gradually the integration of the dual money market in the agricultural sector.

In India, the development of agricultural credit co-operative societies is marked by unevenness and it is important to establish how far these societies have made progress in extending i) coverage of rural population, ii) loans to cultivators, iii) the scale of their activities, and iv) the link between credit and marketing. It is important also, to examine the financial viability of these credit societies.

In this chapter, we shall firstly discuss the nature of the growth of co-operative credit societies in India and the factors which helped or hindered their progress. Secondly, the analysis will be mainly concentrated on the liabilities and assets of these primary credit societies in order to examine their viability. Some relevant criteria to test the efficiency or 'viability' of credit societies will then be applied. The study will be carried out at the macro (ie, all-India) level at the beginning though some attempt will be made to extend the analysis to the state level, to consider regional variations.

Diagram V.I

ORGANISATION OF AGRICULTURAL FINANCE IN INDIA



Source: S.R. Sen, "Review of Organisations and Functions of Agricultural Credit Institutions and Credit Problems in India", in Elizabeth K. Bauer (ed.) - Proceedings of the International Conference on Agricultural and Co-operative Credit, 1952, vol. II, University of California, Berkeley, California, pp. 719-32.

Thirdly, the workings of State and Central co-operative banks - the first two layers of the existing three-tier system of granting credit to the cultivators through the co-operatives - will be discussed briefly. Such a study may be useful in bringing out certain factors which stand in the way of the efficient working of the co-operatives and this may suggest certain policy implications: with regard to rendering the credit societies more viable, increasing competition with money-lenders, and promoting greater integration in a dual money market. This in its turn is expected to make the operation of monetary policy more effective in the Indian rural economy.¹

5.2. 1. Growth of the Co-operative Credit Movement in India: a brief survey:

The origin of the co-operative credit movement in India dates back to 1904 when the Co-operative Credit Societies Act, was passed (though there is evidence to suggest that some form of co-operative societies existed in India even before 1904, particularly in the state of Madras - now Tamil Nadu - in the form of 'Nidhis' or mutual loan societies and in Punjab in 1891 where a co-operative society started working for controlling the common land of the village for the benefit of co-sharers).² From the very beginning of the co-operative movement, "the agricultural credit societies far exceeding, both in number of societies and in membership, though not in working capital all other types of co-operative organizations".³

1 See, for example, S.N.Sen - Central Banking in Underdeveloped Money Markets, Fourth ed., Booklands Private Limited, Calcutta, 1967, PP. 25 - 9. See also, Alak Ghosh - Financial Intermediaries and Monetary Policy in a Developing Economy, The World Press Private Ltd, Calcutta, 1964, P.109.

2 For details, see, E.M.Hough, op cit., ch.111.

3 Ibid. P.53; see also, R.B.I. A.I.R.C.S. vol.11, ch.18, op cit.,

It is useful to clarify here the sources and uses of funds of co-operative credit societies and this is illustrated in diagram.V.1. It is revealed that generally the Provincial or State Co-operative banks depend upon the Reserve Bank of India and the State governments for their funds which they loan out to the Central co-operative banks at the district level. The Central co-operative banks may try to raise deposits or owned funds. But they largely depend upon State co-operative banks for lending to primary credit societies. These primary credit societies are real competitors of money-lenders. Apart from getting loans from Central Co-operative banks, primary credit societies may also raise owned funds to lend directly to member-cultivators. Thus the primary credit societies are the ultimate links in the flow of organized funds to cultivators.

5.2. 2. Causes of Slow growth of Co-operative Credit Societies in India:

The performance of the co-operative credit movement in India is considered as poor and several reasons are advanced to explain its 'failure'.¹ These reasons may be summarised under a few major heads for the sake of a rigorous analysis. In sum, these are, (a) financial, (b) administrative, (c) organizational, (d) factors related to the scale of activities and coverage and (e) institutional. Each one of these causes will be examined carefully in the next few sections.

1 See, R.B.I. - A.I.R.C.S., vol.11, P.245, op cit., See also, Government of India - Report of the Co-operative Planning Committee, Bombay, 1946, PP. 11-12.

(a) Financial: The existence of co-operative credit societies in the midst of peasants with low income and low credit-worthiness itself accounts for the financial weakness of the society. This is so because farmers due to their low income, have low savings and a low volume of assets. Generally, among the richer farmers, the best asset is land whereas among poorer cultivators either there is no asset or whatever the assets they have, those mainly consist of primitive agricultural implements and/or livestock which are insufficient as securities against which credit may be granted. Further, low income and low saving also accounts for the low level of deposits and high level of overdues in the workings of primary societies. In fact, large numbers of societies became 'dormant' i.e., societies which do not advance or collect loans, for quite a few years.¹ It is not surprising that the financial weakness of many co-operative credit societies led to their poor absorptive capacity and in some cases, much of the financial assistance from central financing agencies could not have been disbursed by primary credit societies.² Some quantitative evidence of decline in the financial strength of co-operatives, is also available. Darling reported that owned funds as a percentage of total working capital of primary agricultural credit societies declined from 43 in 1929-50 to 37 in 1955-6. Deposits as a percentage of working capital fell from 11.6 to 8.9 during the same period, whereas overdues as a percentage of loans outstanding went up from 22 to 25 between 1950-1 and 1955-6.

1 See, Government of India: Ministry of Food, Agriculture, Community Development and Co-operation - Report of the Committee on Co-operation, New Delhi, 1966, P.13. See also, i) Government of India-Report of the Committee on Co-operative Credit, New Delhi, 1960, P.200. ii) R.B.I. A.I.R.C.S. vol.11, P. 232, on cit.,

2 See, V. Tirupati Naidu - Farm Credit and Co-operatives in India, Vora & Co., Publishers Private Ltd, Bombay, Allahabad, 1963. P.17.

Further, in 1954-5, in five out of nine major districts, over 25% of agricultural credit societies worked at a loss and in six states in 1955-6, increase in recoveries did not keep pace with increase in advances. There were great regional variations in the membership per society as well as in loans advanced per member and the audit classification in 1955-6 showed that in Bihar, Hyderabad, Madhya Pradesh, Uttar Pradesh and West Bengal, less than 8% of societies were classified as "A" (Model) or "B" (Good) whereas Bombay had about 63% in "A" and "B" group.¹ Such financial weakness also limited the scope for augmenting share capital and reserves of the society.²

(b) Administrative: The administrative problem was one of the major obstacles that stood in the way of effective functioning of co-operatives. The problem is felt not only with regard to the general management of co-operatives,³ but also with their loan administration. While the lack of sense of business management led to insolvency of many primary credit societies⁴ it also accounted for their poor recovery performance, particularly after 1951. Very few primary societies tried to harness the loans to really productive purposes and link fresh borrowing to the repayments which might have implied financing out of internal savings. Sometimes, dates of repayment as fixed by credit societies created inconvenience for the cultivators.⁵ Cases of book adjustments of old loans through renewals which overstated the amount of repayments were not rare.⁶

1 See, Government of India, Planning Commission: Sir Malcolm Darling - Report on Certain Aspects on Co-operative Movement in India, New Delhi 1957, PP. 4 - 7.

2 See, Government of India, Ministry of Food and Agriculture, Chester, C. Davis - Report of Rural Credit in India, New Delhi, 1954, PP. 10-15.

3 See, Daniel Thorner - Agricultural Co-operatives in India: A Field Report, Asia Publishing House, Bombay, 1964. P.1.

4 See, Anwar Iqbal Qureshi - The Future of Co-operative Movement in India, Oxford University Press, Madras, 1947, P.160. See also, V. Tirupati Naidu, op cit., PP. 17-18 and PP. 65-66.

5. R.B.I. - A.I.R.C.S. vol. 11, PP. 217-18, op cit.,

6 Ibid P. 218.

A large proportion of poor cultivators failed to get co-operative credit and loans were generally given to big cultivators.¹ This was not in line with the principles of co-operatives of helping small and poor farmers. It may, however, be added that from the standpoint of increasing production, granting of more credit to big cultivators may not be necessarily undesirable. In many cases, overdues might have been the result of inadequate supervision due to administrative inefficiency.² Sometimes, loans were given on the basis of caste or community.³ It is said that in many cases, the non-credit co-operative societies did not get their required finance from the district central co-operative Banks.⁴ Poor quality of administration resulted in delays in obtaining loans from co-operatives.⁵ The problem of administration was acute even between 1951 and 1968 as evinced recently.⁶ It is also believed that inefficiency in administration was the result of undue reliance on the honorary services of the secretary. This point is stressed in both 1946 and 1964 and it was argued that the appointment of a full-time paid secretary would have rendered the administration more efficient.⁷

1 Ibid. PP. 234-35. See also, B.N. Choubey - Principles and Practice of Co-operative Banking in India, Asia Publishing House, London, 1968 P.49 and Ch.11.

2 R.B.I. - Report of the All-India Rural Credit...(1969) PP.176-7 op cit.

3 Indian Society of Agricultural Economics -Co-operation in Kodinar Bombay, 1951, PP. IX - XII.

4 C.B. Indule - Co-operative Banking in India, Continental Prakashan Poona, India, 1968, P.53.

5 Government of India-Agricultural Finance Sub-Committee(1945), P.45, op cit., see also, FAO Development Paper No.77-New Approach to Agricultural Credit, Rome, 1964, P.1.

6 R.B.I. - Report of the All-India Rural Credit...(1969), PP.176-7, op cit.,

7 Government of India - Report of the Co-operative Planning Committee (1946)..., PP.11-12 op cit., See also, R.B.I - Report of All-India...(1969) P.446, op cit.,

It may be pointed out that the employment of a paid secretary might have raised the cost as well. Nevertheless, it appears, that the problem of loan administration and management of the co-operatives has still remained very important and is yet to be solved - thanks, inter alia, also to the lack of training in banking methods.¹

(c) Organizational: The problem of organization of credit co-operatives on sound lines and their co-ordination with other types of (non-credit) co-operatives may be regarded as quite important. Without proper organization, even an efficient credit mechanism may not yield desirable results unless its effects are buttressed by improving the supplies and services which an organized credit system produces.² Lack of organization in the co-operative credit structure was also responsible for a fragmented approach of the co-operatives towards the solution of rural problems without trying to meet all the wants of cultivators.³ It was observed that in many cases co-ordination between central co-operative banks and primary societies as also between credit and non-credit societies was lacking.⁴ The necessity for re-organization of large numbers of societies has not been denied in the government reports.⁵

1 RBI - Statutory Report(1937), P.24. op cit., See also, RBI - Report of the All-India...(1969), Ch.32. op cit.,

2 See, S.N.Ghosal-Agricultural Financing in India - with special reference to Land Mortgage Banks, Asia Publishing House, London, 1966. P.XI. See also, B.K.Madan-Aspects of Economic Development and Policy. Allied Publishers Private Ltd., Bombay, 1964, P. 95.

3 RBI - Report of the Banking Union at Kodinar, Bombay, 1937, P.16.

4 Report of the Agricultural Credit Organization Committee(1947), PP.16-7, cited in RBI - A.I.R.C.S. vol.II. P.249.op cit., See also, E.M.Hough, op cit., P.334.

5 Government of India - Report of the Committee...(1960) P.200. op cit.,

(d) Factors related to the Scale of Activities and Coverage:

It is possible to trace one of the major causes of the failure of co-operative credit movement in the limited scale of activities of credit societies. In fact, the small size of credit societies accounted for the low volume of their loan transactions and this is supposed to have endangered the viability of credit societies.¹ Further, the coverage of credit societies is not regarded as satisfactory and it is reported that a relatively small proportion of total cultivators borrowed from the co-operatives.² Among those cultivators who obtained loans, the big farmers obtained relatively more than poor and small cultivators.³ To quote: "In general, the credit co-operatives have concentrated on lending to the more prosperous farmers who are least pressed for funds and who are willing to take substantial loans. Those farmers are least penalized by the operating rules of the co-operatives, which are rigid in comparison with those of the money-lenders, and they can benefit by using the loans in profitable investment or even by re-lending to the lower income members of the community".⁴ It may be argued that the small coverage and low turnover might have raised the cost of credit for cultivators.⁵

1. RBI - Report of the All-India Rural Credit...(1969),P.447.op cit.

2. RBI - A.I.R.C.S., vol.11, P.245, op cit.,

3. Ibid. P.230, See also,H.B.Sivamaggi, "Provision of Credit for Small Cultivators:Reconsideration of the Problem" in A.K.Khusro(ed) Readings in Agricultural Economics, Allied Publishers Private Ltd., Calcutta, 1968, PP. 240 - 61.

4. See, John W.Mellor,Thomas V.Weaver, Uma J.Lele, Sheldon R.Simon - Developing Rural India, Cornell University Press, Ithaca,New York, 1968, PP.65-66. See also, Michael Lipton - Supply Problems Matter Most in the Economy, Institute of Development Studies,Brighton,1969. P.2.

5. United Nations: Department of Economic Affairs - Rural Progress Through Co-operatives,New York, 1954, PP.6-7. See also, FAO Development Paper No.16. Sir Bernard O.Binns - Agricultural Credit For Small Farmers, FAO of the United Nations, Rome, Italy,1952.P.3.

(e) Institutional: The institutional factors may be regarded as very important in accounting for the failure of co-operatives. From the very beginning of the co-operative credit movement, it had to face tremendous opposition from landlords and private traders. In the workings of co-operatives, the influence of caste and village politics, of big traders and landlords was clear.¹ In states like Madras, co-operatives suffered very much from government intervention.² Such cases of government interference and government assistance at the cost of the rest of the economy has been called into question by some writers.³ The other institutional factors are: i) the absence of leadership because of the super-imposed way of organizing the primary societies from above, ii) lack of education and the feudal background of Indian villages, iii) a defective system of land tenure and the subsistence nature of agricultural economy, iv) political factors, v) lack of right co-operative conduct.⁴

In view of the complexity of the nature of institutional factors, it is not difficult to understand why the Indian socio-economic environment has promoted a form of institutional credit which is urban-biased and which neglected agriculture.⁵

1 RBI - A.I.R.C.S. vol.11. PP. 265-67, op cit.,

2 Daniel Thorner, op cit., P.1. See also, Sheila Gorst - Co-operative Credit for Producers and Consumers, Basil Blackwell Oxford, 1962, P.104.

3 See, for example, P.T.Bauer - Indian Economic Policy and Development, George Allen and Unwin Ltd., London, 1961, P.76.

4 RBI - Report of the All-India Rural Credit...(1969), PP.186-200, op cit.,

5 RBI - A.I.R.C.S. vol.11, PP.265-7, op cit.,

It is well observed: "The failure of co-operative credit is explicable in terms of the total impracticability of any attempt to combine the very weak in competition with the very strong and expect them by themselves to create conditions firstly for their emancipation from the interests which oppose them, and secondly for their social and economic development in the context of severe disadvantages historically imposed on them by a structure of the type described. The problem is not so much one of reorganization of co-operative credit as of the creation of new conditions in which it can operate effectively and for the benefit of the weaker".¹

The persistence of large-scale illiteracy, lack of local leadership, the existence of a defective system of land-tenure, influence of politics in the day-to-day administration of the co-operatives and the impact of a feudal structure in the villages still dominated by landlords and traders are still now the important institutional factors which must be reckoned to explain the failure of co-operative credit movement in India. Between 1951 and 1968, many of these institutional problems were not solved. Further analysis of these problems is beyond the scope of this study.

1 Ibid., P. 279.

5.2. 3. Summary of the causes of failure and their evaluations:

Among the reasons for the lack of success of co-operatives discussed previously the most basic seem to be related to the low scale of activity of co-operatives, their financial weaknesses and their problems emanating from loan administration.¹ The institutional factors are important, but an enquiry into their solutions takes us beyond the scope of our present analysis. The important problem is the low income of the agricultural population and this largely accounts for the financial weaknesses of credit societies. It is not surprising, therefore, that when the credit co-operatives could not successfully mobilize internal resources, they had to depend on external funds. This need not be treated as a serious problem as long as the co-operatives become successful in giving loans (and in this respect, it will be shown later that they were, to some extent, successful) and obtain funds from those commercial banks which were successful in mobilizing deposits. Here is an important linkage which may be developed further.

It seems, that the most important problem that the co-operatives are now facing is the problem of loan administration and sound management. Indeed, it was one of the major problems that the co-operative credit societies have faced between 1951 and 1968 in their way to obtain viability.

1 See a) RBI - Rural Credit Follow-up Survey, 1956-7, P.459, op cit.,
 b) RBI - Rural Credit Follow-up Survey, 1957-8, PP.195-96, op cit.,
 c) RBI - Rural Credit Follow-up Survey, 1958-9, PP.241-42, op cit.,
 d) RBI - Rural Credit Follow-up Survey, 1959-60, P.158, op cit.,
 See also, V. Tirupati Naidu, op cit., P.76.

The reported progress of co-operatives in the sphere of loan advanced,¹ may be stultified if the recovery performance which is related to the problem of loan administration does not improve. It is argued that "in any credit system, the concept of needs and resources becomes meaningful only when they are looked upon as factors to be reckoned with in a continuing operation. An essential condition for maintaining this continuity is the ability of the system to recover the amount lent by it".² This is an important observation worth pointing out. As the co-operatives are largely subsidized by the Reserve Bank (because the Bank gives loans to the co-operatives at 2% below the Bank Rate) and as the Bank had to be guided by both liquidity and profitability considerations, therefore, despite taking a liberal approach towards the grant of rural credit in the sixties,³ the Bank can hardly afford to ignore the recovery performance of co-operatives. "In fact, it will be failing in its duty if it were not to draw a firm line between promoting development of credit institutions and itself assuming the role of such institutions".⁴ It may not, hence, be wrong to suggest that the problem of loan administration is one of the key-problems that has got to be solved for placing co-operative credit societies on a sound footing in view of the above analysis of the actual operations of co-operative credit societies in India in recent times.

1 See, i) G.M.Laud-Co-operative Banking in India, The Co-operative Book Depot, Bombay, 1956, PP. 662-704.

ii) Gilbert Etienne - Studies in Indian Agriculture: The Art of the Possible, University of California Press, Berkeley, California, 1968 P.81.

iii) Michael Linton, "Strategy for Agriculture: Urban bias and Rural Planning" in Paul Streeten and Michael Linton (eds) - The Crisis of Indian Planning: Economic Planning in 1960's, Royal Institute of International Affairs, Oxford University Press, 1968, PP.26-27.

2 RBI-Standing Advisory Committee on Rural and Co-operative Credit Bombay, 1967, PP. 64-86.

3 RBI-Role of Reserve Bank of India in Rural Credit, Bombay, 1964, PP. 14-15.

4 RBI-Standing Advisory Committee...(1967), PP. 68-9, on cit.

5.3. 1. An Analysis of Workings of the Primary Agricultural Credit Societies: Some testable hypotheses:

Some of the major tests to measure the financial strength of the co-operative credit mechanism may involve considering the proportion of deposits to working capital, borrowings to working capital and overdues to loans outstanding. Specifically, to conclude that the financial strength of a credit society has improved, we should expect that,

- a) the proportion of owned funds to working capital should rise,
- b) the proportion of overdues to loans outstanding should fall,
- and c) the proportion of deposits to working capital should rise.

It is possible to suggest that as an improvement of the financial strength, it may be expected that the proportion of borrowing to working capital should decrease. But this point may be debated on the ground that if the central bank considers lending to co-operatives as a reasonable way to expand the reserve base of the monetary system, then a rising proportion of borrowing, by itself, need not be treated as an index of weakness of the financial structure of co-operatives. Further, instead of buying central government securities, if the central bank starts buying co-operative paper, then a direct linkage may be developed. Similarly, the co-operatives may also sell co-operative paper to the commercial banks and this may open up a new source of funds.

If the commercial banks can mobilize deposits, the linkage is promoted between commercial banks and co-operatives, and if co-operatives grant loans to a larger proportion of cultivators, the necessity of a rapid rise in the deposit-credit ratio need not be over-emphasized.

What is to be precisely emphasized is the use of loans in a productive way and their repayment in due time. This is, again, a problem of loan administration and supervision which we have stressed before. Alternatively, to attract rural funds, the deposit rate has to be raised. But this may push up the ultimate lending rate to cultivators and the relative shift in demand for loans from co-operatives may fall.

Other supplementary criteria to judge the success of credit societies may also be applied. Such tests include:

- (a) the change in the proportion of villages covered by co-operative credit societies; and
- (b) the change in the proportion of borrowing members from co-operative credit societies.

In the following sections, after considering the general picture, these tests will be applied first at the macro (ie, all-India) level and then at the State-level to take into account state-wise variations.

5.3. 2. Growth of Primary Agricultural Credit Co-operative Societies: 1950-51 to 1968-9: All-India:

The general pattern of development of primary agricultural credit co-operative societies is shown in table 5.1. These figures are mostly in terms of all-India averages. It is shown that the average membership of primary societies went up by more than 3½ fold between 1950-51 and 1968-9 ie, from 45 to 174. The rise in average share capital per member between the same period was roughly the same, though the rise in average share capital per society was quite impressive.

TABLE 5.1 : PRIMARY AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES: TOTAL MEMBERSHIP COVERAGE AND COMPOSITION OF WORKING CAPITAL IN AVERAGES. 1950-51, 1960-61, 1968-9 : ALL-INDIA

YEARS	TOTAL NUMBER (in thousands)	TOTAL MEMBER- SHIP	AVERAGE MEMBERSHIP	AVERAGE SHARE CAPITAL PER SOCIETY (Rs.)	AVERAGE SHARE CAPITAL PER MEMBER	AVERAGE DEPOSITS PER SOCIETY (Rs.)	AVERAGE DEPOSITS PER MEMBER (Rs.)	AVERAGE WORKING CAPITAL PER SOCIETY (Rs.)	PERCENTAGE of VILLAGES COVERED BY ACTIVE SOCIETIES	PERCENT- AGE OF BORROWING MEMBERS TO TOTAL POPULATION COVERED BY ACTIVE SOCIETIES	PERCENT- AGE OF BORROWING MEMBERS TO TOTAL POPULATION COVERED BY MEMBERS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1950-51	115,462	5,154	45	727	16	388	9	3,547	N.A.	N.A.	N.A.
1960-61	212,129	17,041	80	2,722	34	688	9	12,913	66	24	53
1968-9	167,760	291,173	174	9,973	57	3,388	19	48,414	86	33	38

Sources: i) Reserve Bank of India.

Statistical Statements relating to the Cooperative Movement in India, 1950-51 to 1968-9, Bombay

ii) Reserve Bank of India.

Selected Statistics on Co-operative Credit in India, 1969, 1970, Bombay

Average deposits per society rose substantially, but the rise in average deposits per member was hardly satisfactory as it rose from Rs. 9 in 1950 - 51 to Rs. 19 in 1968-9. Average working capital per society rose substantially and so did loans per member. The rise in deposits per member was much less than the rise in loans advanced per member. This implies that a great proportion of loans advanced by credit societies was financed not by deposits but by external sources like borrowing. These points may be more clearly understood through closer examination of the composition of the working capital of primary credit societies and this is attempted in the next section.

5.3. 3. Composition of Working Capital of the Primary Agricultural Credit Co-operatives: 1948-9 to 1968-9:

The financial structure of credit societies may be examined first with reference to the change in the proportion of deposits to total working capital. In table 5.2. it is shown that the proportion of deposits to total working capital decreased from 12.4 in 1948-9 to 6.9 in 1968-9. In the same period, the proportion of owned funds to working capital declined continuously from 44.6 to 26.5 while the proportion of borrowing to working capital rose from 43 to about 62.

This clearly implies that the primary credit societies are now depending more heavily than before upon borrowing rather than upon either owned funds or deposits for their working capital. This also reflects the inability of primary credit societies to mobilize more deposits from the rural economy.¹ Greater amount of funds may be borrowed if loans advanced also increases. Here inability to mobilise need not be a matter of serious concern if the repayment performance is sound. This was, unfortunately, not the case as will be revealed in the next section.

1 See, P.C. Bhattacharya, "The Changing landscape of Banking" in RBI Bulletin March, 1967. P.339.

TABLE 5.2 COMPOSITION OF WORKING CAPITAL OF THE PRIMARY AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES AND THEIR PROFIT OR LOSS:
ALL-INDIA : 1949-50, 1960-61, 1968-69.

(Figures in Percentages)

Years	Percentage of owned capital to working capital	Percentage of deposits to working capital	Percentage of borrowings to working capital	Percentage of recoveries to total loans outstanding	Percentage of overdues to outstandings	Net Profit(+) or net loss (-)(Rs. in crores)	Percentage of profit in working capital
	1	2	3	4	5	6	7
1948-9	44.6	12.4	43.1	54.5	22.1	0.74 (+)	2.1
1960-61	27.6	5.3	63.8	74.6	20.3	4.43 (+)	1.6
1968-9	26.5	7.0	62.0	68.0	34.6	10.88 (+)	1.2

Sources: i) Reserve Bank of India - Statistical Statements relating to the Co-operative Movement in India, 1948-9, 1960-61, 1968-8, Bombay.

ii) Reserve Bank of India - Selected Statistics on Co-operative Credit in India: 1969, 1970, Bombay.

5.3. 4. Overdues, recoveries and loans outstanding: 1948-9 to 1968-9.

An important indication of the financial viability of credit societies is the change in the proportion of overdues to total loans outstanding. This proportion was 22.1 in 1948-9, 20.3 in 1960-1 and 34.6 in 1968-9 at the all-India level (see table 5.2). Thus, although there was slight improvement in 1960-61 over 1948-9, the situation has clearly worsened by 1968-9.

The proportion of recoveries to loans outstanding rose from 54.5 in 1948-9 to 74.6 in 1960-1 but declined to 68.0 in 1968-9. In comparison with 1960-61, the recent fall in this proportion is disturbing. However, this fall may be due to adverse weather and crop conditions during 1965-7. Nevertheless, it may be stated that the recovery performance during the sixties should have been better and no effort should be spared in future to improve upon loan administration to ensure quick recovery and reduce the burden of overdues.

5.3. 5. Profit and Loss: 1948-9 to 1968-9.

The profit and loss account of the credit societies is another indication of the financial condition of credit societies. It is reflected that in 1949-50, net profit of all primary credit societies was Rs. 0.74 crores (approx.) In 1960-61, it went up to Rs. 4.43 crores and in 1968-9, it stood at Rs. 10.88 crores (table 5.2).¹ However, profit as a percentage of working capital fell from 2.1 to 1.2 between 1948-9 and 1968-9. This may not appear to be very unsatisfactory at the macro-level though the picture may look different once the analysis is disaggregated. However, we shall now turn to a composite indicator used in the adult classification of credit societies, to assess the financial strength of societies.

1 Given the rate of default, the reason that profit could be made is that there are book adjustments and loans are renegotiated.

5.3. 6. Audit Classification:

The primary credit societies are generally classified into five groups in the audit classification. Group 'A' includes the model societies, group 'B' includes those which are in a sound condition and capable of managing their own affairs, group 'C' includes the mediocre societies, having their defects but "muddling on", group 'D' includes those whose financial condition is in very bad shape and in group 'E' those societies are included which are in hopeless condition.

In the audit classification of the credit societies in 1956-7 and 1967-8 (see table 5.3), it is shown that in 1956-7, the proportion of 'A' type societies to the total number of societies was only 2.7. While 'B' type societies formed a little more than 15 per cent of the total. However, 'C' type societies formed about 65 per cent of the total and their proportion was highest. The 'E' type societies formed little above 2 per cent of the total.

In 1967-8, the proportion of the 'A' type societies remained almost the same while that of 'B' type societies fell by about 2 per cent. Similarly, the decline of the proportion of 'D' type societies was also marginal while that of 'C' type societies moved up by about 4 per cent. The proportion of 'D' type societies declined from 2.13 to 0.76.

The audit classification stated here displays the somewhat stagnant nature of the performance of agricultural credit co-operative societies in India between 1956-7 and 1967-8. In this period, the proportion of 'A', 'B' and 'D' type societies did not change appreciably, while that of 'C' type societies rose by about 4 per cent.

TABLE 5.3 AUDIT CLASSIFICATIONS AND PROFIT AND LOSS OF THE PRIMARY AGRICULTURAL CREDIT SOCIETIES: 1956-7

AND 1967-8 : STATE-WISE DATA (Continued)

States	Percentages of societies	A	B	C	D	E	Net profit(+) or loss (-) (In thousands of rupees)	Net Profit as percentage of working capital
1. Andhra Pradesh: 1956-7 1967-8	0.77	12.34	82.11	4.78	-	-	5,39	0.3
2. Assam: 1956-7 1967-8	1.44	3.04	73.87	21.65	-	-	28,55	0.7
3. Bihar: 1956-7 1967-8	0.29	55.37	21.64	22.70	-	-	72	0.4
4. Gujarat: 1960-61 1967-8	-	27.64	57.25	15.11	-	-	-110	-0.2
5. Jammu & Kashmir: 1956-7 1967-8	0.31	4.13	80.05	12.64	2.87	2.87	2,17	0.9
6. Kerala: 1956-7 1967-8	0.56	4.85	63.73	29.46	1.40	1.40	1,32,05	5.9
7. Madhya Pradesh: 1956-7 1967-8	9.18	58.19	24.54	8.09	-	-	54,06	2.0
8. Maharashtra: 1960-1 1967-8	11.13	42.93	35.64	10.29	-	-	95,27	1.1
9. Mysore: 1956-7 1967-8	16.96	12.15	0.86	70.02	-	-	39	0.4
10. Orissa: 1956-7 1967-8	0.96	8.76	78.03	12.24	-	-	3,36	0.4
11. Punjab*: 1956-7 1967-8	3.63	26.01	49.97	20.39	-	-	-22	-
12. Rajasthan: 1956-7 1967-8	1.04	10.68	46.09	41.41	0.78	0.78	1,01,84	3.6
13. Tamil Nadu: 1956-7 1967-8	0.20	4.90	79.30	13.09	2.51	2.51	9,35	0.8
14. Uttar Pradesh: 1956-7 1967-8	0.50	3.00	91.21	5.30	-	-	1,74,94	2.4
15. West Bengal: 1956-7 1967-8	14.85	53.08	26.58	5.49	-	-	46,16	1.1
All India: 1956-7 ** 1967-8 **	738	34.55	52.24	5.83	-	-	1,33,52	0.8
	6.86	44.51	29.21	19.42	-	-	11,21	1.0
	5.67	29.18	52.06	12.55	0.55	0.55	54,15	1.1
	0.12	4.46	82.96	11.86	0.59	0.59	10,33	2.8
	0.12	4.83	78.10	16.94	-	-	70,89	3.6
	4.46	30.41	63.41	11.08	0.64	0.64	25,05	1.9
	4.18	19.39	75.70	0.73	-	-	80,25	1.8
	1.30	35.63	40.89	21.19	0.99	0.99	7,61	2.6
	0.37	4.72	46.47	47.42	1.02	1.02	27,29	1.5
	1.40	17.20	75.68	5.72	-	-	5,70	0.4
	1.38	10.85	69.03	18.74	-	-	88,05	1.5
	-	0.65	75.89	23.46	-	-	58,27	4.2
	0.02	0.88	86.50	12.60	-	-	1,42,46	1.8
	0.10	0.37	61.09	10.76	18.68	18.68	2,74	0.9
	0.15	1.21	76.57	15.09	6.98	6.98	23,75	1.3
	2.71	15.02	64.92	15.22	2.13	2.13	-	-
	2.58	12.95	68.88	14.83	0.76	0.76	-	-

SOURCE: RBI: Statistical Statements relating to the Co-operative Movement in India, 1957-8, 1961-2 & 1968-9, Bombay

The only healthy sign exhibited in the report was the slow fall in the proportion of 'E' type societies. Such a fall might have been caused by the methods adopted to liquidate those primary societies whose financial condition was hopeless. However, some other explanatory tests will be used to judge the progress of credit societies.

5.3. 7. Number and Membership of Primary Agricultural Credit Societies: 1950-51 to 1968-9:

The growth of membership of primary agricultural credit societies may be regarded as a useful criterion to indicate the performance of credit societies. At the all-India level, it has been noted (see table 5.1) that the total number of primary societies rose from 1,15,462 in 1950-51 to 2,12,129 in 1960-61 and in 1968-9, the number was 167,760. This fall in the number of credit societies between 1960-61 and 1968-9 was mainly due to the steps which were taken to re-organize the primary credit societies on a sound basis. The average membership per society was 45 in 1950-51, 80 in 1960-61 and 174 in 1968-9 (see table 5.1) The total membership in the same period rose appreciably from about 47,77 thousands to 2,91,73 thousands in 1968-9 (see table 5.1) However, the proportion of active societies to total societies rose from 81 in 1960-61 to 87 in 1968-9. This trend reflects the activization of a greater proportion of societies under the scheme of re-organization.

5.3. 8. Coverage of Agricultural Credit Societies:

The proportion of rural population covered by agricultural credit societies is a meaningful index by which to judge the progress of co-operative credit societies. It is revealed in table 5.1 that in 1960-61 about 66% of the total villages in India were covered by active credit societies. In 1968-9, it went up to 86%. When the percentage of rural population covered by active societies is considered, it was observed that it was only 24 in 1960-61 and 33 in 1968-9. Thus only one-third of total agricultural population is now actually covered by credit societies. When the proportion of borrowing members to total members is considered, it was 53 in 1960-61 and 38 in 1968-9. It appears that on both counts, the progress of the primary agricultural credit co-operatives was not very satisfactory.¹ However, a more comprehensive view of the workings of agricultural credit societies may be obtained by extending the analysis to the state-level and such an attempt has been made in the next section.

5.4. 1. Composition of Working Capital of Primary Credit Societies in the different Indian States: 1957-8 to 1967-8:

The growth of co-operative credit societies in different Indian states is characterized by unevenness. In some of the Indian states, the credit societies have developed fairly well while in some other states, particularly in Eastern India, the progress was poor.

1 It was recently observed: "The main short comings of the co-operative system, which vary from State to State, are the problems of overdues, indifferent management, domination of co-operatives by vested interests, shortage of resources, lack of effort to mobilise deposits, untrained staff, certain policies and procedures followed which are not suitable to local environment and the weak arrangements for linking credit to marketing". See, RBI - Organizational Framework... (1969, P.15. op cit.)

With this broad picture in mind, it may be useful to examine the nature of change in the composition of working capital in different Indian states between 1957-8 and 1967-8 to understand the relative difference in the financial strength of credit societies in different parts of India. 1957-8 is chosen because in periods before that, the available data are not strictly comparable because of changes in the boundaries of different states after 1955-6. It should be mentioned that for states like Maharashtra and Gujarat, the years of comparison are 1959-60 and 1967-8 simply because the former Bombay province was divided into Maharashtra and Gujarat in 1959 and data for the two separate states are available from 1959-60.

In table 5.4, change in the composition of working capital for different states is clearly shown. It is revealed that in 1957-8, the proportion of deposits to working capital was highest in Punjab (18.5), followed by Kerala (17) and Jammu and Kashmir (13.5). In other states, the proportion was below 10 and it was lowest in Assam (1.1). In 1967-8, Punjab once again recorded the highest proportion (25.2), followed again by Kerala (21.7). The proportion fell alarmingly in Jammu and Kashmir in 1967-8 (1.1) and this was the lowest proportion among all the Indian states. In Assam, the proportion moved up to (6.8). In the case of other states, no significant change was observed. Thus, except in the case of Punjab and Kerala, the record of deposit mobilisation on the part of other states does not seem to be encouraging.

TABLE 5.4 : COMPOSITION OF WORKING CAPITAL OF PRIMARY AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES AND THEIR COVERAGE IN INDIAN STATES: STATE-WISE DATA: 1957-8 AND 1967-8

STATES	PERCENTAGE OF DEPOSITS TO WORKING CAPITAL	PERCENTAGE OF BORROWING TO WORKING CAPITAL	PERCENTAGE OF PAID-UP TO WORKING CAPITAL	PERCENTAGE OF RESERVES TO WORKING CAPITAL	PERCENTAGE OF VILLAGES SERVED BY SOCIETIES ACTIVE SOCIETIES (1966-7 (a)	PERCENTAGE OF VILLAGES SERVED BY SOCIETIES ACTIVE SOCIETIES (1966-7 (a)
a) Andhra Pradesh: 1957-8 1967-8	4.4 6.0	71.8 67.3	15.7 18.4	8.1 8.3	61.2 94.3	75.4
b) Asaam: 1957-8 1967-8	1.1 6.8	85.4 75.4	10.5 15.6	3.0 2.3	36.4 66.9	32.8
c) Bihar: 1957-8 1967-8	4.1 2.0	64.7 76.5	23.1 19.1	8.2 2.4	32.3 93.3	88.1
d) Gujarat: 1959-60 1967-8	5.6 4.3	64.0 65.7	24.3 22.7	6.0 7.3	95.4 98.4	92.4
e) Jammu & Kashmir: 1957-8 1967-8	13.5 1.1	58.5 91.0	19.2 6.6	8.9 1.5	69.3 87.5	77.1
f) Kerala: 1957-8 1967-8	17.0 21.7	23.0 50.5	30.8 21.1	29.1 6.7	98.3 100.0	75.2
g) Madhya Pradesh: 1957-8 1967-8	3.0 4.2	74.0 75.7	19.4 14.2	9.2 5.8	54.7 100.0	94.0
h) Maharashtra: 1959-60 1967-8	2.2 2.2	68.7 68.1	22.2 24.9	6.8 4.8	92.2 99.5	97.9
i) Mysore: 1957-8 1967-8	7.8 5.4	61.0 65.8	20.6 21.0	10.7 7.8	77.7 98.0	85.0
j) Orissa: 1957-8 1967-8	3.5 7.0	71.3 64.7	19.2 18.7	5.9 9.4	41.4 92.0	69.4
k) Punjab 1967-8 1967-8	18.5 25.2	43.4 54.0	23.3 17.2	14.8 3.6	71.5 98.9	82.7 (b)
l) Rajasthan: 1957-8 1967-8	3.7 5.7	65.1 69.4	23.6 23.1	7.7 1.8	32.3 87.3	65.1
m) Tamil Nadu 1957-8 1967-8	4.9 6.0	68.0 63.7	15.1 20.3	12.0 9.9	82.5 100.0	54.8
n) Uttar Pradesh 1957-8 1967-8	3.6 5.1	54.3 66.2	31.1 22.5	10.8 6.2	56.6 100.0	N.A.
o) West Bengal : 1957-8 1967-8	4.1 4.2	61.6 73.6	18.2 17.8	16.1 4.4	46.9 79.4	56.9

Sources: i) Reserve Bank of India - Statistical Statements relating to the Co-operative movement in India, Bombay, 1957-58, 1959-60 and 1967-68.

ii) a) Reserve Bank of India - Report of the All-India Rural Credit Review Committee, Bombay, 1969, p. 144.

b) Including Maryana.

As regards the proportion of borrowing in working capital (see table 5.4), borrowing was by far the most important element of working capital in nearly all the states. In eleven out of fifteen states, the proportion was greater than 60. In 1957-8, it was lowest in Kerala(23), followed by Punjab(43.4) and Uttar Pradesh(54.3). In 1967-8, it was highest in Jammu and Kashmir(91), followed by Bihar(76.5), Madhya Pradesh (75.7) and West Bengal(73.6). The increasing ratio was really disquieting for Jammu and Kashmir, Bihar, West Bengal and Madhya Pradesh. In the case of Assam, the proportion decreased slightly. Once again, Kerala depended least upon borrowing (50.5), followed by Punjab (54). No significant change was witnessed in the case of Gujarat, Maharashtra; Madhya Pradesh, Mysore, Rajasthan and Tamil Nadu. The heavy dependence upon borrowing of almost all the states indicates clearly the inability of most of these states to mobilize internal resources for financing credit under co-operative requirements.

The largest proportion of paid-up capital in working capital in 1957-8 was observed in Uttar Pradesh (31.1), followed by Kerala (29.1) and Gujarat (24.3). It was lowest in Assam (10.5). For a large majority of the states, the proportion varied between 15 and 25. In 1967-8, Maharashtra occupied the top position (24.9) and in the case of Kerala, the proportion fell to 21.1. Some improvement was noticed in the case of Assam (i.e. 15.6) while Jammu and Kashmir registered the lowest proportion (6.6). When the proportion of reserves in working capital is considered, in 1957-8, Kerala topped the list (29.7), followed by West Bengal (16.1), Punjab (14.8) and Tamil Nadu (12).

For many states the proportion was below 10. Sharp decline was observed in all states in 1967-8. The proportion was highest in Tamil Nadu (9.9) and lowest in Jammu and Kashmir (1.5). The proportion fell from 29.1 to 6.7 in Kerala and caused concern in West Bengal and Bihar.

The important implication that follows from the above analysis is that the composition of working capital differed between the states and in some cases, the difference was quite significant. Further, most of the states depended substantially upon borrowing as a source of working capital and the degree of dependence did not decrease between 1957-8 and 1967-8. Excluding Punjab and Kerala, the record of deposit mobilisation was unsatisfactory in most states. While the structures of working capital of Punjab, Kerala, Maharashtra and Tamil Nadu looked better than many other states, such structures appeared to be weak in states like Jammu and Kashmir, Assam, West Bengal, Bihar and Rajasthan.

5.4. 2. Audit Classification of Primary Societies in different Indian States: 1956-7 and 1967-8:

The audit classification of primary societies is a useful way of judging financial strength. Table 5.3, reveals that in 1956-7, the proportion of 'A' type societies was less than 1 in most of the states. Jammu and Kashmir had the highest proportion of 'A' type societies (16.96), followed by Maharashtra (14.85), Gujarat (9.18), Mysore (6.86) and Punjab (4.46). Gujarat had the largest proportion of 'B' type societies (58.19), followed by Assam (55.37), Maharashtra (53.08), Mysore (44.51), Rajasthan (35.63) and Punjab (30.41).

It must be said that a large proportion of 'A' type societies in Jammu and Kashmir is, indeed, very surprising. In 1967-8, Gujarat accounted for the highest proportion of both 'A' and 'B' type societies (11.13 and 42.93) respectively and Maharashtra came second with 7.38 per cent of 'A' and 34.55 per cent of 'B' type societies. The position of Assam and Rajasthan worsened substantially as the proportions of 'B' type societies fell from 55.37 to 27.64 in Assam and from 35.63 to 4.72 in Rajasthan. In both these states, percentage of 'A' type societies was negligible. As regards 'A' and 'B' type societies, the record of West Bengal, Uttar Pradesh, Bihar and Orissa appeared to be very bad. The proportion of 'C' type societies was very large in almost all the states in 1956-7 and the percentage of 'E' type societies was largest in West Bengal (18.68) - a dismal record indeed. Jammu and Kashmir had the highest proportion of 'D' type societies (70), followed by Uttar Pradesh (23.46) and Assam (22.70) in 1956-7. In 1967-8, Rajasthan had the largest proportion of 'D' type societies (47.42), followed by Kerala (41.41) and Bihar (29.46). In Jammu and Kashmir, this proportion fell rapidly from 70.02 to 12.24 and in Uttar Pradesh it fell from 23.46 to 12.60. There was also a drop by about 7 per cent in the case of Assam. In Andhra, this proportion went up substantially from 4.78 to 21.65. West Bengal, however, managed to reduce the proportions of both 'D' and 'E' type societies in 1967-8 though it had the largest proportion of 'E' type societies (6.98).

On the whole, it appears from the audit classification that in West Bengal, Assam, Bihar, Uttar Pradesh, Rajasthan and Orissa, the viability of credit societies has been endangered while better performance has been observed in the case of Gujarat and Maharashtra in recent times. For a large majority of the states, the picture was nearly stagnant. Nevertheless, the present analysis highlights the uneven nature of progress of the co-operatives and such a situation clearly calls for more purposive action in the backward regions.

5.4. 3. Loans advanced, Overdues and Loans Outstanding: 1960-61 and 1968-9:

Some other important indicators of financial strength may include the change in average loans advanced and the change in the proportion of overdues to loans outstanding. Thus, if the average loans advanced per borrowing member is considered (see table 5.5), then in 1960-61, Gujarat topped the list (Rs.426), followed by Maharashtra (Rs. 330), Madhya Pradesh (Rs.274), Andhra Pradesh (Rs. 267) and Madras (Rs.249). Assam (Rs.45) and Jammu and Kashmir (Rs.47) registered the lowest amount of average loan advanced. In 1968-9, Gujarat still headed the list (Rs.1,004), followed by Maharashtra (Rs.690), Punjab (Rs.578) and Tamil Nadu (Rs.518). Bihar advanced least (Rs.163), followed by Jammu and Kashmir (Rs.214), though Assam recorded some improvement (Rs.295). Thus, in terms of loans given per borrowing member, the performance of Gujarat, Maharashtra, Punjab and Tamil Nadu was much better than that of Bihar, Jammu and Kashmir, Assam, West Bengal and Rajasthan.

TABLE 5.5 LOANS ADVANCED, OVERDUES AND LOANS OUTSTANDING AND COVERAGE OF THE PRIMARY AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES IN THE INDIAN STATES: 1960-61 and 1968-69: STATE-WISE DATA

	Average loans per borrowing member (Rs.)	Proportion of overdues to loans outstanding	Average membership per society	Membership (In Thousands)
	1	2	3	4
a) Andhra Pradesh: 1960-61 1968-69	267 331	17 37	104 129	1,438 1,954
b) Assam: 1960-61 1968-69	45 295	74 75	51 102	267 383
c) Bihar: 1960-61 1968-69	74 163	45 46	56 152	961 2,500
d) Gujarat: 1960-61 1968-69	426 748	22 24	115 146	853 1,273
e) Jammu & Kashmir: 1960-61 1968-69	47 214	21 31	175 245	240 266
f) Kerala: 1960-61 1968-69	132 363	17 26	345 705	806 1,532
g) Madhya Pradesh: 1960-61 1968-69	274 387	18 37	44 194	901 1,958
h) Maharashtra: 1960-61 1968-69	330 690	20 39	96 152	1,827 3,060

TABLE 5.5 (continued) LOANS ADVANCED, OVERDUES AND LOANS OUTSTANDING AND COVERAGE OF THE PRIMARY AGRICULTURAL CREDIT CO-OPERATIVE SOCIETIES IN THE INDIAN STATES: 1960-61 and 1968-69: STATE-WISE DATA

		1	2	Proportion of overdues to loans outstanding	Average membership per society	Membership (In Thousands)
		Average loans per borrowing member (Rs.)				
i) Mysore:	1960-61	227	34		3	1,198
	1968-69	560	41		132 184	1,647
j) Orissa:	1960-61	156	20		62	409
	1968-69	288	47		355	1,365
k) Punjab:	1960-61	209	26		70	1,298
	1968-69	578	26		132	1,378
l) Rajasthan:	1960-61	198	31		62	673
	1968-69	284	31		122	1,180
m) Tamilnadu:	1960-61	249	12		191	2,038
	1968-69	518	29		440	3,193
n) Uttar Pradesh:	1960-61	157	9		61	3,340
	1968-69	352	28		196	5,306
o) West Bengal:	1960-61	131	33		50	629
	1968-69	259	57		78	991

Source: Reserve Bank of India - Selected Statistics on Co-operative Credit in India, 1969, 1970, Bombay.

As regards the proportion of overdues to loans outstanding, it is revealed that in 1960-61, Uttar Pradesh had the lowest proportion (9), followed by Madras (12) and Kerala (17). The record appeared to be worst in Assam (74), followed by Bihar (45), Mysore (34) and West Bengal (33). In 1968-9, the proportion was lowest in Gujarat and Haryana (24), followed by Punjab and Kerala (26). Assam once again staged the worst performance as the proportion stood at (75), followed by West Bengal (57). The major disturbing feature here was that in most of the states, overdues constituted more than one-third of total loans outstanding. Further, in states like Assam, Jammu and Kashmir and Rajasthan, overdues of the last three years as a proportion of total overdues were significantly high.¹ The problem has become serious in state like Maharashtra where co-operative credit societies are comparatively well-developed.

The above analysis, once again, highlights the uneven nature of progress of co-operatives. It also points out sharply the problem of loan administration in different states which we have emphasized earlier. Loan administration apart, the low scale of activity of many credit societies might have stood in the way of promoting viability.²

5.4. 4. Profit and Loss Account: 1956-7 and 1967-8:

The test of profitability may partly indicate the financial condition of credit societies. Using this test in 1956-7, Uttar Pradesh showed highest net profit (Rs.58,27 thousands), followed by Maharashtra (Rs.49,16 thousands) and Punjab (Rs.25,05 thousands) (See table 5.3).

1 See, RBI - Report of the All-India Credit...(1969), P.523 on cit.,

2 Ibid. P.447. To quote: "It was only in two states, viz., Gujarat and Kerala, that the average loan business per society exceeded RS.50,000! The figure was regarded as the minimum transaction necessary to attain viability."

Kerala showed a small loss and net profit was small in Jammu and Kashmir (Rs.39 thousands) and Assam (Rs.72 thousands). In 1967-8, Madhya Pradesh recorded the largest amount of net profit, followed by Uttar Pradesh and Maharashtra. Assam was in the red with a loss of about Rs.110 thousands and its performance was poorest. Other states managed to earn positive net profit though there is no reason to think that the existing profit levels should not be improved. This can easily be understood once net profit is considered as a percentage of total working capital. It was less than 5% in case of all states in 1956-7 and less than 6% in all states in 1967-8. In many states, it was less 1% in both 1956-7 and 1967-8. The ratio is surprisingly high in Bihar and this may be due to bad data.

5.4. 5. Coverage: State-Wise data: 1957-8 and 1968-9:

The nature of progress of co-operative credit societies may also be evaluated by looking at indicators like coverage, average membership etc. Thus, the average membership per society was highest in Kerala (345) in 1960-61, followed by Tamil Nadu (191) and Jammu and Kashmir (175). It was lowest in Madhya Pradesh (44), followed by West Bengal (50), Assam (51), Bihar (56), Uttar Pradesh (61) and Orissa and Rajasthan (62) - (see table 5.5). In 1968-9, the position of the different states in this respect did not alter significantly, Kerala, once again, had the highest number of members per society (705), followed by Tamil Nadu (440). In Orissa, there was an appreciable rise from 62 to 355 whereas in the case of West Bengal, it rose from 50 to 78 only.

As regards the proportion of the villages covered by the societies, in 1957-8, in Bihar and Rajasthan, only 32.3 per cent of the total villages was covered by the societies against 90 per cent covered in both Gujarat and Maharashtra in 1959-60. In 1967-8, in Kerala, Madhya Pradesh, Uttar Pradesh and Tamil Nadu, credit societies covered 100 per cent of all villages whereas in Assam only 67 per cent of total villages was covered (see table 5.4). This may suggest that credit societies are now covering a greater proportion of villages in most of the states. This conclusion must be accepted with caution because the percentage of villages covered by the active societies was 54.8 in Tamil Nadu, 32.8 in Assam and 56.9 in West Bengal. However, in states like Maharashtra and Gujarat, actual coverage was much greater than in states like Assam and West Bengal.

5.4. 6. Results of the State-wise Study:

The state-wise analysis of the progress of co-operative credit societies has some interesting implications. Firstly, it clearly shows the uneven nature of progress of credit societies in different Indian states. Secondly, the nature of working capital was such as to indicate that most of the states depended largely upon borrowing and only Punjab and Kerala were successful in mobilising deposits to relatively greater extent than the other states. The structure of working capital in Gujarat, Punjab, Kerala, Maharashtra and Tamil Nadu looked better than many other states like Jammu and Kashmir, Assam, West Bengal, Bihar and Rajasthan.

The audit classification also shows the weak financial strength of the last named states in comparison with states like Gujarat and Maharashtra-states which also staged good performance in loans advanced in comparison with Assam, West Bengal, Jammu and Kashmir, Rajasthan, Bihar and Orissa. The problem of loan administration appeared to be most acute in Assam where the highest percentage of overdues was recorded and least in Punjab, Gujarat and Kerala in recent times. Coverage was good in states like Kerala and Maharashtra and poor in states like Assam, West Bengal, Bihar, Uttar Pradesh, Orissa and Rajasthan. The last-named states plus Jammu and Kashmir may thus be regarded as relatively backward in comparison with states like Gujarat, Maharashtra and Punjab.

It is unrealistic to seek a single explanation for all the differences and several reasons may be advanced. Some of them are a priori and given the existing state of data, there is little alternative to making some a priori judgements. First, it may be argued that the growth of the co-operatives had been more in those states where the system of land-tenure was characterized by the owner-cultivator relationship than in those states where the landlord-cultivator relationship predominated.¹ This is borne out to some extent by the relative success of co-operatives in West and South Indian states in comparison with East Indian states. Second, the scale of transaction of credit societies may partly explain the inability of many societies to attain viability in different states.² The difference in progress may also be due to differences in the efficiency of loan administration as well as in the management of credit societies.³

1 RBI - Organizational Framework...(1969), pp.30-1, op cit.,

2 Ibid. P.30.

3 Ibid. P.P. 29-32.

Fourth, a greater linkage between credit and marketing, coupled with the introduction of the crop-loan system might have enabled some states to stage better performances.¹ Fifth, the differential growth rates in agriculture might explain partly the difference in the progress of co-operatives. This was borne out by the examples of states like Maharashtra and West Bengal, or Madras and Assam.² Further, the rate of growth of per capita income may also explain, to some extent, the divergent nature of progress of the credit societies. For example, in Maharashtra and Madras (where the progress of co-operatives was much better than in states like Assam and West Bengal), per capita income changed by 28.4 and 40.5 per cent respectively, between 1951 and 1961 when such changes were negative for West Bengal (-2% per annum) and Assam (-1.8% per annum) in the same period.³ Finally the nature of the area (ie, dry or wet), might have led to differences in the level of loans given by the co-operatives.⁴

5.5. 1. Composition of Working Capital of the Central Co-operative Banks: all-India:

In the three-tier system of granting credit to primary credit societies, the central co-operative banks occupy the middle as they link the apex or State co-operative banks to primary credit societies to ensure the flow of funds from the highest to the lowest level. In this section, we shall mainly analyse the composition of working capital of the central co-operative banks and try to observe the nature of its change over-time.

1 Ibid. P.16 and P.29.

2 National Council of Applied Economic Research - Estimates of State Income, New Delhi, 1967, PP.58-9.

3 Ibid. P.58.

4 See, N.S.Johda and M.L.Bhat, "Institutional Finance: Problems and Prospects in arid Agriculture" in Indian Journal of Agricultural Economics, vol. XXIII, No.4, October-December, 1968. PP.30-7.

TABLE 5.6 COMPOSITION OF WORKING CAPITAL OF THE CENTRAL CO-OPERATIVE BANKS : ALL-INDIA: 1950-51, 1960-61, 1968-9

Years	Percentage of paid-up capital to total working capital	Deposits as percentage of working capital	Borrowings as percentage of working capital	Percentage of reserves to working capital	Percentage of overdues to loans outstanding
	1	2	3	4	5
1950-51	7.2	67.0	17.3	8.5	8.7
1960-61	13.1	36.8	46.4	3.9	12.5
1968-9	13.9	42.2	39.1	4.8	26.9

Sources: i) Reserve Bank of India - Selected Statistics on Co-operative Credit in India, Bombay, 1969.
 ii) Reserve Bank of India - Selected Statistics relating to Co-operative Credit in India, (1966-67, to 1968-69), Bombay, 1970.

This will allow us to understand the extent to which central co-operative banks have satisfied the criterion of deposit mobilisation. The present analysis is carried out at the all-India level and therefore leaves room for state-wise differences.

It may be observed (see table 5.6) that between 1950-51 and 1960-61, the proportion of paid-up capital to total working capital rose from 7.2 to 13.1, but that of reserves fell from 8.5 to 3.9. Deposits as a proportion of working capital fell from 67.0 to 36.8 whereas the proportion of borrowing rose from 17.3 to 46.4 in the same period. Thus, although the proportion of owned funds to working capital remained almost the same, the fall in the proportion of deposits and rise in the proportion of borrowings indicates greater dependence of the central co-operative banks upon external rather than upon internal funds. The rise in the proportion of paid-up capital was mainly brought about by a greater state contribution to share capital. If these tendencies persist even in the long-run, it may cause genuine concern.¹

Between 1960-61 and 1967-8, some signs of improvement were observed. The proportion of owned funds rose from 16.7 to 19.2 and that of deposits also rose from 36.8 to 42.6. The proportion of borrowing decreased from 46.4 to 38.2. However, when the proportion of overdues to outstanding is observed, the financial position of central co-operative banks did not seem to be very satisfactory. The proportion was 8.7 in 1950-51, 12.5 in 1960-61 and 26.9 in 1968-9. This shows that like primary credit societies, the central co-operatives are also suffering from the problem of loan administration.

1 See RBI Bulletin, October, 1961, PP.1594-1609, especially P.1607.

The problem is no doubt serious and requires urgent measures. Otherwise, the viability of central co-operative banks may be seriously affected. It may, however, be mentioned that the fall in the number of central co-operative banks is in line with the schemes for re-organization of these banks. The central co-operative banks largely depend for their funds upon the State co-operative banks and we will now consider the financial structure of State co-operative banks.

5.5. 2. Composition of Working Capital of State Co-operative banks:
all-India: 1950 - 1969:

The State or Apex Co-operative banks occupy the top strata of the co-operative banking structure. These banks are situated in each state and between 1951 and 1969, their number has gone up from 15 to 25. The State co-operative banks usually get loans from the Reserve Bank of India at a concessional rate to finance the central co-operative banks who in their turn finance the primary societies. Generally, the State co-operative banks get loans from the Reserve Bank at a rate 2 per cent below the Bank Rate for current agricultural operations and marketing of crops and $1\frac{1}{2}$ per cent below the Bank Rate for medium-term as well as for other purposes. The availability of funds at a concessional rate enables the State co-operative banks to finance central co-operative banks at cheap rate.

The change in the composition of working capital (see table 5.7) of State co-operative banks is interesting. The proportion of paid-up to working capital went up from 4.6 in 1950-51 to 8.2 in 1960-61 but fell slightly to 6.6 in 1968-9.

TABLE 5.7 COMPOSITION OF WORKING CAPITAL OF STATE CO-OPERATIVE BANKS AND THEIR NUMBER : 1950-51, 1960-61, 1968-9: ALL-INDIA

Years	Percentage of paid-up to working capital	Percentage of reserves to working capital	Percentage of deposits to working capital	Percentage of borrowing to working capital	Percentage of overdues to loans out- standing
	1	2	3	4	5
1950-51	4.6	6.4	64.1	24.8	12.0
1960-61	8.2	2.6	32.6	56.5	4.2
1968-9	6.6	6.6	38.0	48.6	5.0

Sources: i) Reserve Bank of India - Selected Statistics on Co-operative Credit in India, Bombay, 1969.

ii) Reserve Bank of India - Selected Statistics relating to Co-operative Credit in India (1966-67 to 1968-69), Bombay, 1970.

The proportion of reserves to working capital was 6.4 in 1950-51, 2.6 in 1960-61 and 6.6 in 1968-9. Thus, the proportion of owned funds in working capital was 11 in 1950-51 and 13.2 in 1968-9. However, the proportion of deposits went down from about 64 in 1950-51 to 32.6 in 1960-61. There was a modest recovery in 1968-9 when the proportion stood at 38. However, the percentage of borrowing rose sharply from 25 to 57 between 1950-51 and 1960-61. This indicated heavy leaning upon the Reserve Bank of India for funds. The proportion of borrowing registered some decline in 1968-9 when it stood at 48.6.

One notes that the proportion of overdues to loans outstanding was 12 in 1950-51, 4.2 in 1960-61 and 5 in 1968-9. The decline in the proportion of borrowing and of overdues and rise in the proportion of deposits and owned funds may be regarded as healthy signs for the financial state of the State co-operative banks and it may be stated that the over-all structure of assets and liabilities of State co-operative banks is better than that of both central co-operative banks and primary credit societies.

5.5. 3. Evaluation:

The upshot of the above analysis is to focus attention on the major problems which stand in the way of the efficient working of different types of co-operative credit societies. It appears that the problems of primary credit societies are more acute than those of other types of credit societies since the composition of their working capital seems to be more vulnerable. It must, however, be admitted that despite heavy odds against them, the co-operatives have made some commendable progress in giving loans to cultivators.

But the major problem which was repeatedly highlighted is the problem of loan administration both at macro and micro-levels, particularly the problem associated with increasing proportion of overdues in case of both central co-operative banks and primary credit societies. Any attempt to promote greater viability of credit societies must include immediate attention to this problem. It was supposed to be solved by the integration of credit with marketing. Such integration, by itself, is an important linkage to promote recovery.¹ Unfortunately, the record of performance of co-operative marketing societies remained very unimpressive between 1951 and 1964.² A survey conducted for the years 1962-3 revealed that 15 per cent of the total number of marketing societies did not report any type of business activity and the proportion of sale through co-operatives was very low.³ It was observed: "Considering the three main objectives for which they were organised - advancing of pledge loans, marketing of agricultural produce and distribution of supplies - the actual performance of the marketing societies was none too encouraging".⁴ This makes the task of developing the marketing system extremely important. This may require careful planning and state assistance, effective control of markets and improvement of management, extension of trade credit, making the financially sound co-operatives the buying agents of the government, promotion of storage capacity and helping the societies in processing agricultural produce.

1 See J.C. Abbott, "Case Studies of Advances in Marketing in Tropical Countries" in Monthly Bulletin of Agricultural Economics and Statistics, Vol. 19, Nos. 7/8, (FAO of the U.N.), July/August, 1970, PP. 1-5. See also, H.P. Singh, "Farm Marketing and Green Revolution" in Yojana, vol. XLV, No. 3, February, 22, 1970, P. 9.

2 RBI Bulletin, October, 1961, P. 1603. See also RBI Bulletin, May, 1969, P. 652.

3 RBI Bulletin, May, 1969, P. 652.

4 Ibid. P. 652.

Some direct inducements may be given to cultivators to sell their crops through the marketing societies. Progressive commercialization may also contribute to the success of marketing societies.

The developement of other linkages to render credit societies more viable includes package programmes like building up storage capacity and warehouses, which may serve the basis for developing negotiable credit instruments and the provision for easier and quick system of transport from producing to the consuming centres.

Obviously, the development of all these linkages may not be as fast as may be wished without adequate trained personnel, effective and sound management and co-ordination among all the successive stages from production to distribution. The whole system is badly in need of considerable streamlining and necessary reorganisation without which even the theoretically ideal policy may fail in practice. There need not be any universal rule regarding the actual implementation of different steps for such reorganisation in view of considerable regional variations. It is also important to realize that the financial structure of any credit mechanism depends upon the over-all strength of the whole economy and the rate of economic growth.¹ The problems related to overdues, borrowings and mobilisation of deposits may largely depend upon the level and the rate of growth of income. Here the constraints upon the improvement of income, repayments and deposits may be related more to the real factors than to the monetary factors. Nevertheless, where the system permits and the extent to which credit may increase the availability of real resources, no effort should be spared to improve upon the present condition of the main credit mechanism through which the integration of the dual rural money market in India is supposed to be brought about.

1 See, for example, Horace Belshaw, "Requisites of a Sound Credit System for Agriculture" in Elizabeth K. Bauer (ed) - Proceedings of the International Conference on Agricultural & Co-operative Credit, vol. 1. University of California, Berkeley, California, 1952, pp. 551-7.

5.6. Conclusions:

The following conclusions may be drawn on the basis of our present study:

- (1) There was considerable unevenness in the progress of primary credit societies during the period of our study.
- (2) At the all-India level, the primary credit societies could not satisfy the four financial criteria for judging viability of credit societies. Between 1948-9 and 1967-8, deposits as a proportion of working capital fell from 12.4 to 6.7, proportion of owned funds declined from 44.6 to 26.8 whereas the proportion of borrowing went up from 43 to 66.5. The composite index used in audit classification shows a somewhat stagnant picture. Thus primary credit societies failed to mobilize internal resources and became increasingly dependent upon external sources for funds. Though the co-operative credit societies may not have been very efficient in mobilizing deposits, in some cases, they achieved good progress in advancing loans to the cultivators. However, since the proportion of agricultural taxation in India is very low, the increasing dependence of credit societies upon external sources may add to the suspicion that a substantial part of capital formation in the farm sector in India has continually been financed by a savings flow from the non-farm sector, "though the latter's relative importance has been decreasing".¹
- (3) Although the primary credit societies have made substantial progress with regard to the coverage of villages, this result should be accepted 'with a grain of salt' because of the presence of many inactive societies in many states. As regards the coverage of borrowing members from co-operatives, the performance of the primary societies must be regarded as poor. Thus, judged by supplementary tests, the performance of credit societies was unsatisfactory.

1. See, for example, Shigeru Ishikawa - Economic Development in Asian Perspective: Economic Research Series, No. 8. The Institute of Economic Research, Hititsubashi University, KinoKuniya Bookstore Co, Ltd. Tokyo, 1967, P. 307.

(4) The problems of loan administration and ability to repay reflected in the rising proportion of overdues in loans outstanding seems to be the major cause of concern for primary societies. The central co-operative banks are also suffering from the same problem and this was aggravated after 1960-61. Unless measures are adopted quickly to solve this problem, the credit machinery is in danger of being clogged and paralysed.

(5) The financial structure of State co-operative banks appeared to be in a much better state in comparison with both primary and central co-operative banks during the period of observation.

(6) In some states like Gujarat, Punjab and Maharashtra, primary credit societies appeared to be in a much better shape than those in Assam, West Bengal, Bihar, Jammu and Kashmir and Rajasthan.

This implied the necessity of taking some important steps in the lagging states for,

(a) reorganisation of the credit societies and

(b) supplementing the organized credit machinery with the help of other types of credit agencies like the Agricultural Credit Corporations.

(7) The desired integration between credit and marketing has not yet taken place and here the performance was, indeed, very poor. The operation of the whole system at present is a cause of concern.

In the next chapter, we shall discuss in detail the nature of the main existing linkages between the organized and unorganized sectors, examine the role of main agencies for promoting such integration and suggest means for achieving further integration.

LINKS BETWEEN THE ORGANIZED AND UNORGANIZED
MONEY MARKETS IN THE INDIAN RURAL ECONOMY:
PROBLEMS AND PROSPECTS:

6.1. INTRODUCTION:

The promotion of linkages between organized and unorganized money markets in India has been highlighted as one of the major problems of our present study. In this context, the role of co-operatives has already been examined in the last chapter. In this chapter, firstly, we shall make reference to the existing literature which describes the links between the dual money markets. Secondly, the nature and development of linkages will be examined on the basis of some indicators within the limits of availability of data. Thirdly, the role of existing organized agencies, co-operatives apart, will be analysed to show the extent to which these agencies were successful in promoting integration. Here, an attempt will be made to suggest some means which may be useful for promoting further integration. Finally, some conclusions will be drawn on the basis of our analysis.

6.2. 1. A reference to the Literature:

The problem of integration of the dual money market in India has been discussed for quite some time. Unfortunately, despite receiving much attention in the past, the problem has not yet been solved. Some reference to the existing linkages has been made in official reports.

To quote: "... the joint-stock banks play little direct part, and the Imperial Bank much less, in the supply of credit to the agriculturists. These banks do not look upon agricultural finance as part of their general business. Banks, however, do finance agriculture indirectly by financing merchants who give advances to the small village dealers; and some banks lend direct on the pledge of produce and valuables and on mortgage. This indirect financing by intermediaries is, however, costly..."¹

It is, however, very difficult to make an exact estimate of the amount of indirect financing of the unorganized sector by organized financial agencies in the absence of reliable data. Further, the money-lenders generally do not turn to the organized agencies for borrowing since their own funds mostly cover the demand for their loans. It is reported that only 28 per cent of the village money-lenders interviewed felt the necessity to get funds in addition to their own resources.² However, indirect financing by commercial banks through urban money-lenders and some indigenous banks may exist.

Attempts have been made in the past to induce some of the indigenous financial agencies to come into the fold of the organized money market. It has been suggested that indigenous bankers should be brought into direct contact with the Reserve Bank along with commercial and co-operative banks and should be given rediscount facilities.³

1 RBI - A.I.R.C.S. vol.11, P.180, op cit., which cited Government of India - The Indian Central Banking....(1931), P.191, op cit.,

2 RBI - A.I.R.C.S. vol.11, P.178, op cit.,

3 Government of India - The Indian Central Banking...(1931), PP.106-10, op cit.,

It is also recommended that should there be a link between the Reserve Bank and the indigenous bankers, these bankers should formulate their business methods on lines similar to commercial banks, and especially, should develop deposit banking. Further, such indigenous bankers should maintain proper books of account and have them audited by accountants and the Reserve Bank should have the right to inspect such accounts.¹ It has been proposed that linkage might be developed if the commercial banks could discount the bills of approved money-lenders drawn for advances to cultivators against produce. In such cases, the Reserve Bank should consider the possibility of offering rebates for rediscounting such bills when these are offered by commercial banks.²

The Agricultural Finance Sub-Committee (1945), however, suggested the establishment of Agricultural Credit Corporations as alternative agencies for lending to the cultivators.³ The Co-operative Planning Committee (1946) also recommended the establishment of such corporations to provide all types of agricultural credit.⁴ However, the Committee (1946) suggested, that for the growth of organized credit agencies in rural areas, there should be legal regulation of markets, establishment of licensed warehouses and an attempt should be made to make the receipts of such warehouses into negotiable credit instruments. In other reports, it is suggested that properly organized village co-operative banks might serve the purpose of bringing cultivators into closer contact with the organized rural money markets.⁵

1 RBI - Statutory Reports(1937), P.42 and PP.56-8, on cit.,

2 Ibid. P.41.

3 Government of India-Report of the Agricultural Finance...(1945), PP.37-9, on cit.,

4 Government of India-Report of the Co-operative Planning Committee, 1946, Bombay, 1946, P.71.

5 RBI - Co-operative Village Banks. Bombay, 1937, PP.57-8.

Such contact could be made possible "if the village bank deals with its members in a comprehensive manner, and can ensure the sale of their produce through its agency the recovery of crop loans will become easy, certain and quick".¹ For promoting the links between village banks and co-operative union or commercial banks, agricultural bills were sought to be created to enable the Reserve Bank to give funds.²

As regards the problem of integrating the money-lenders, the Central Banking Committee(1931) suggested that Co-operative societies of money-lenders could be formed and such societies should lend only to the primary societies and not to individuals.³ A similar suggestion was also made later.⁴ Another writer suggested that the money-lenders could be transformed into agents of commercial banks.⁵

After independence, the Rural Banking Enquiry Committee (1950) suggested the necessity of expanding the branches of commercial banks in a cautious manner and described the desirability of utilising the co-operative societies and the Post-Office Savings Banks for mobilising rural savings.⁶ The idea of developing Post-Office Savings Banks is apposite and it appears that if the Post-Offices could be transformed into some sort of village banks, then an important linkage may be developed. However, there is little direct reference to the problem of developing linkage between different types of money markets in the Rural Banking Committee Report.

1 Ibid. P.57.

2 Ibid. P.58.

3 Government of India - The Indian Central Banking...(1931), PP.91-3, op cit.,

4 Government of Madras - Report of the Economist...(1946),PP.68-9, op cit.,

a/ 5 See, K.K.Sharma - Reserve Bank of India and Rural Credit, Premier Publishing, Delhi, PP. 38-9.

6 Government of India-Report of the Rural Banking...(1950),PP.42-3, op cit.,

The Committee on Finance for Private Sector (1954) indicated a few measures for promoting integration between organized and unorganized money markets.¹ Specifically, it was recommended that the shroffs or businessmen who generally carried out transactions in sight hundis should decide upon the possibility of introducing 90 days hundis, if practicable. In order to support the use of usance hundis, the government might have diminished the rates of stamp duty on such hundis. The Reserve Bank could also offer rediscounting facilities to Shikarpuri shroffs through commercial banks, provided that the shroffs would be maintaining proper books of account.²

It is difficult to understand how the links between money-lenders and the organized agencies can grow unless the demand for loans is increased considerably and unless the money-lenders start using negotiable credit instruments. It has been argued that to develop the links, it may be necessary to create incentives for the money-lenders to increase the scale of their activity and to reduce interest rates and this may be done by changing the elasticity and/or the amount of demand for his funds or by lowering his unit cost.³ Elasticity of demand for loans may be increased through increased competition among money-lenders. But such a situation is difficult to visualize in the Indian context where the cultivators owe habitual allegiance to particular money-lenders.

1 RBI - Report of the Committee on Finance for Private Sector, Bombay, 1954, PP.68 - 70.

2 See, for example, G.P.Gupta - The Reserve Bank of India and Monetary Management, Asia Publishing House, London, 1959, PP.209-11.

3 Anthony Bottomley, "Credit Expansion and Growth in Underdeveloped Rural Areas" in The Indian Economic Review, vol.VI, No.2, August, 1962 PP.125-143.

It is argued that growth could take place if additional borrowing is spent for productive purposes through improved methods of cultivation - methods which are supposed to augment the demand for loans. Once the money-lenders' funds for supplying additional credit which would be demanded are exhausted, the central bank may think about sending officials round the rural areas who would act as "rediscount" salesmen. "These rediscount salesmen should be authorized to point out to money-lenders that the central bank is willing to rediscount reasonably well-secured loans, and they should also be allowed to explain the ways in which the money-lender can find an increased market for his funds through encouraging his clients to buy or rent, clear and cultivate more land, as well as more capital goods in their production process".¹ Money-lenders are reckoned as a 'vital factor of production' in the rural economy and full utilization of their knowledge and talent is advocated.

It may be argued here that until now, money-lenders have not shown much eagerness to co-operate with organized agencies and it is doubtful to what extent they would abide by the laws of organized financial agencies should they be granted rediscounting facilities. Further, channelling of credit through the money-lenders rather than through the co-operatives will strengthen the competitive position of money-lenders vis-à-vis the co-operatives. This may further imply that returns to co-operatives may not rise whereas the appointment of so-called 'rediscounting salesmen' will inflate cost.

1 Ibid. P. 143.

The other suggestions which were made to link the indigenous bankers with the organized sector may be briefly stated as follows:

a) The indigenous bankers should undertake and develop bill-broking business and discharge the same functions in Indian money market as those which are done by bill-brokers in the London money market.¹

b) The indigenous bankers may be asked to submit regularly their certified balance sheets and in exchange for this, they should be offered some of the facilities provided to the scheduled banks.²

c) The Reserve Bank should not insist on knowing in advance how many indigenous bankers would be prepared to join the scheme for integration that might be prepared by the Bank.³

d) The indigenous bankers may be allowed to keep a reduced amount of owned capital.⁴

e) The ~~n~~on-banking business of indigenous bankers need not be separated from their banking activities at the beginning. However, different accounts should be maintained for different types of activities. These relaxations are regarded as necessary since indigenous bankers would be 'member banks' and not scheduled banks.

However, the refinance and rediscount facilities would be available to the indigenous bankers not directly from the Reserve Bank but from commercial banks.⁵

f) Instead of declaring the indigenous hundis as clean bills and thus ineligible for rediscounting, the Reserve Bank should declare those hundis as eligible for rediscounting which are genuine bills arising from such transactions as marketing and production and bear two signatures - one that of a scheduled bank and the other of some member bank.

1 S.G.Panandikar, op cit., PP.82-3. 2 G.P.Gupta, op cit., P.209.

3 Ibid. P.209.

4 B.M.L.Nigam-Banking and Economic Growth(with special reference to India); Vora & Co., Publishers Private Ltd.Bombay,1967,PP.184-85.

5 Ibid. PP. 184-85.

It is not clear from Nigam's writings how far the Reserve Bank will be successful in attracting the indigenous financial agencies within the organized fold by asking them to maintain a lower volume of owned capital since the entry of indigenous bankers is voluntary and since these bankers prefer to carry out their transactions in camera. It may also be pointed out that simple separation of accounts by the indigenous banks may not achieve much. "Liabilities incurred in respect of the one would have to be made good in the last resort for the assets of the other... It is obvious that even if they were legally separated an individual who was conducting the two separate types of business could draw on the assets of the one to meet the liabilities of the other so that even though the balance sheets in respect of the banking department seemed perfectly sound and satisfactory, the assets might be found to have disappeared when a call came to be made on them".¹

While discussing the same problem Brahmananda argued that "one may not insist too much upon the prior condition of differentiation of functions and of ceilings on rates of interest on advances".² The commercial banks may lend to the unorganized sector at an interest rate lower than what is charged on industrial borrowers if the indigenous financial agencies form consortia. Such lending to a consortia may be regarded as similar to usance credit and this might lead to integration. Karkal, to promote such an end, favoured the encouragement of trade bills rather than accommodation bills, to standardize different hundis, to regulate the hundi business by introducing a system of licensed brokers and to recognise the hundis as liquid assets to ensure greater flow of funds to unorganized market.³

1 RBI - Statutory Report, (1937), P. 52. op cit.,

2 See Gopal Karkal, op cit., P.XVIIII.

3 Ibid. PP. 124-5.

It may not of course, be easy to form a consortia of indigenous bankers. The eventual separation of banking from non-banking activities cannot be ruled out to prevent mis-use of funds, Karkal's idea of improving the nature of hundi business is relevant but without improving the quality of hundis, it is difficult to understand how hundis could be treated as wholly liquid assets.

In sum, in order to develop the integration with the indigenous financial agencies, the Reserve Bank suggested that indigenous bankers should forego their non-banking business and formalize their methods of business, promote deposits and keep proper account books; should allow the Reserve Bank officials to inspect their accounts; and should furnish periodical information to the Bank. In return, the Reserve Bank would allow the indigenous bankers to enjoy rediscounting and other facilities with the Bank in line with other commercial banks. Since the indigenous bankers did not show much desire to satisfy the conditions laid down by the Bank, their integration with the organized sector was not brought about.¹ On the other hand, the activities of money-lenders could not have been controlled by passing various types of legislations, particularly when it was thought that with inadequate credit facilities, closure of activities of indigenous financial agencies would adversely affect agricultural growth.²

The nature and type of different types of links between the organized and unorganized money markets have not been examined very carefully in most of the writings related to the problem of integration.

1 See, IMF: Research Department: Financial Institutions of India - with special reference to the Mobilization of Domestic Resources for Development, 1950, P.10.

2 See, D.K.Rangnekar - Poverty and Capital Development in India, Royal Institute of International Affairs, Oxford University Press, London, 1958, PP.57-8

Karkal, however, used some indicators to analyse the growth of these linkages. By using the data for rediscounting the bills presented by the shroffs, Karkal tried to indicate the nature and trend of the linkage.¹ Unfortunately, Karkal did not take the total value of bills discounted for the shroffs either as a proportion of agricultural income or as a proportion of total advances made by the commercial banks. In fact, it is difficult from Karkal's analysis to say whether the linkages have changed or not. We shall try to show later how far change in this respect has taken place by using the same type of data.

In an important study, U Tun Wai examined the nature and growth of linkages between the organized and unorganized money markets in underdeveloped countries.² The criteria to judge the linkages which was used can be briefly summarised:

(a) The extent to which the operation of commercial banks working in the organized sector helped to finance directly or indirectly the agricultural sector. The test may not be very perfect but it may be interesting to observe how this test works in India.

(b) The relative importance of institutional credit in the unorganized money markets may be another indicator. Generally institutional credit is supplied by commercial banks, co-operative credit societies, land mortgage banks and other types of agricultural credit institutions financed by the government.³

While applying this test, Wai has compared the outstanding agricultural loans of such institutions with national income originating in the agricultural sector and with the currency in circulation, the test revealed that the link was weak in most Asian countries though it was strong in some Latin-American countries.

1 Gopal Karkal, *op cit.*, PP.77-8.

2 U Tun Wai, *op cit.*, IMF Staff Papers, November, 1957, PP.80-142.

3 *Ibid.* PP.94-5.

(c) The proportion and amount of money-lenders' borrowing from the commercial banks may be regarded as yet another indicator of the growth of linkages. In the Indian context, very little data are available to apply this test.¹

(d) The borrowing of exporters and traders in agricultural goods is stated to be another index of the growth of linkages to the extent such borrowing takes place from commercial banks. Here again, in the Indian economy, it is very difficult to apply this test because of the nature of data.²

(e) The other way to judge the development of integration of the dual money market is stated to be the proportion of agricultural bills discounted by the organized credit agencies. Wai said that Japan has effectively linked the two markets by developing agricultural bills drawn by agriculturists and co-operatives which are discounted and rediscounted by the co-operatives and commercial banks to make the funds available.³ In India, in the absence of agricultural bills, it is not possible to use the test to understand the linkages. Nevertheless, the Japanese example of the development of agricultural bills may be regarded as useful for the future development of the Indian rural money market.

(f) The nature of the central bank's supply of agricultural credit directly or through other agencies may influence the growth of linkages.⁴ In India, the RBI has indirectly financed the agricultural sector in substantial amounts mainly through the co-operatives.

1 Ibid. PP. 95-6.

2 Ibid. P. 96.

3 Ibid. P. 97.

4 Ibid. P. 98.

The merit of this type of linkage lies in the fact that the central bank may influence more directly the cost and availability of credit in unorganized money market. However, the important disadvantage of such a linkage is that the central bank may be under political pressure not to restrict credit in unorganized money market even when an over-all credit restriction is required. Secondly, the central bank could undertake such financing of the unorganized sector only to a limited extent in view of the immense responsibilities to discharge other types of central banking activities.

The criteria which may be used to measure the size of organized money market may be of two types:¹

- (a) The 'liquidity preference' approach which considers the matter from the liability side of balance-sheet of banks and where the ratio of deposit money to money supply is taken as the yardstick;
- (b) the 'loanable fund' approach which treats the matter from the asset side and where the ratio of banking system's claims (which includes loans, advances and bills discounted) on the private sector to national income is considered.

The first index may show the growth of the banking sector rather than the growth of money market. To the extent growth of commercial banking is equivalent to the growth of money market, the index may reflect the growth of money market. However, we shall point out the limitations of these two approaches when we shall apply these methods to measure the Indian money market.

1 See, U Tun Wai, "Interest Rates in the Organised Money Market in Underdeveloped Countries", in IMF Staff Papers, vol.V, No.2. August, 1956, PP. 249-78.

It has been shown before how different policies were formulated to accommodate the indigenous financial agencies within the organized money market. In contrast to the idea of bringing the indigenous agencies within the organized sector, a completely different view was expressed in the Rural Credit Survey (1951-2) report. To quote: "It is certainly obvious that the money-lenders can be allotted no part in this scheme, important or insignificant, notwithstanding a dominance which today is overwhelming. Thus, it would be a complete reversal of the policies we have been advocating to give him a position in the co-operative banking structure, when the whole object of attempting to develop and strengthen that structure is to provide a positive institutional alternative to the money-lender himself, something which will compete with him, remove him from the fore-front and put him in his place".¹ In the same report, it is said that the money-lenders might have served some useful purpose. But "the real point is not what the money-lender does, but what the State has omitted to do".² It is believed that once a strong organized alternative agency is built up, most of the defects associated with the operations of money-lenders could be removed. In the following section, we shall try to evaluate the relative merits of different recommendations.

6.2. 2. Evaluation of the Recommendations:

The reference to the existing literature on the problems of linkages between the organized and unorganized rural money markets suggest that there are broadly two approaches with regard to the integration of the dual money market: either the indigenous financial agencies should be supplanted by alternative institutional agencies or they should be accommodated within the existing organized sector with certain changes in their operations.

1 See, RBI - A.I.R.C.S. vol. 11, PP. 481-82, on cit., See also, B.K. Madan, "India" in W.F. Crick (ed) - Commonwealth Banking System, Clarendon Press, Oxford, 1965, P. 190.

2 Ibid. P. 482.

According to the first group, a strong and viable organized financial agency should be set up to provide an effective alternative to the money-lenders. According to the second group, in view of the dominant position of money-lenders in the rural economy, it may be very difficult to replace them by any organized agency within a short-time and since the alternative organized agency like co-operatives is not strong enough to become effective rivals of the money-lenders and since the money-lenders performed some useful tasks, attention should be paid to the problem of changing the activities of money-lenders in such a way as to remove their malpractices and to provide them some incentives to join the organized agencies. The incentives which are suggested may be briefly stated:

- (a) relaxations of the conditions for segregating the banking from the non-banking business;
- (b) treatment of the hundi as liquid asset eligible for being rediscounted by the Reserve Bank;
- (c) formation of an association of indigenous financial agencies which would issue negotiable credit instruments against which loans may be granted, and
- (d) formulation of a plan for providing accommodation to the indigenous financial agencies without insisting on knowing how many indigenous bankers and money-lenders are prepared to join.

It is hoped that if the RBI provides the above incentives, then the money-lenders and indigenous bankers would submit the reports to the RBI and they should also allow the RBI to audit their accounts.

The RBI, in its turn, should provide these financial agencies such rediscount and remittance facilities as the commercial banks generally enjoy. On the basis of our analysis, it appeared that although the co-operative credit societies were partly successful in providing loans to the cultivators, they faced the problem of loan administration, at the all-India level, and particularly with regard to certain states. This problem has created considerable concern over the financial strength of co-operative credit societies especially since the limited gains that the co-operatives have made in giving loans are now at the danger of being neutralized because of the mounting problem of overdues. Notwithstanding the weakness of co-operatives, in order to promote integration, attempts may be made to standardize the hundis and to provide accommodation against them so long as they are used for genuine, non-speculative transactions drawn by such reputed indigenous bankers as Multani bankers. In such cases, the hundi may not be treated as a wholly liquid asset. The condition of segregating the banking from the non-banking activities may be relaxed at the beginning, but the indigenous agencies must, in that case, maintain proper accounts for different purposes which the RBI could inspect and audit. However, once the transactions of indigenous agencies reach a level which could be decided by the RBI, these indigenous agencies would be asked to rescind wholly their non-banking activities. There is, of course, some wisdom in the argument that funds may not be used in a desirable way even if the accounts are separated. The implementation of the programme of segregation of activities may be made time-bound and this may be helpful in allowing the RBI to evaluate periodically the effects of relaxation of the condition of segregation of activities.

The idea of forming consortia of indigenous financial agencies has many practicable difficulties because of the heterogeneity of such agencies and diversity in their methods of operation. An interesting method for promoting linkage is to develop agricultural bills and here the role of some of the organized agencies will be considered later. Presently, we shall attempt to quantify the links between organized and unorganized agencies.

6.3. 1. Links between the Organized and Unorganized Sectors: The Problem:

The tests of links between the organized and unorganized financial agencies in the Indian rural money market are imperfect. First, there is very little reliable data on assets and liabilities of indigenous agencies. Second, the type of tests which are generally carried out are not comprehensive. Such criteria are really partial and inadequate. Further, in some tests, assumptions regarding changes in output, money supply and income-velocity of money may not be entirely realistic. We may, however, try to understand the nature of the growth of two sectors by examining the progress of the organized money market, via either the 'liquidity preference' (ie., deposit as a proportion of money supply) or the 'loanable fund' (ie., claims as a proportion of national income) approach. The 'liquidity preference' method is strictly an index of the growth of the banking sector and, as has been already stated, to the extent the growth of the banking sector coincides with the growth of organized money market, the index may reflect the growth of organized money market. In the 'loanable fund' method, it is assumed that the price-level and income-velocity of money remain fairly stable over the period of analysis.¹

¹ In fact, income-velocity in India remained fairly stable between 1950-51 and 1961-2. See, for details, Ramgopal Agarwala - An Econometric Model of India: 1948-1961, Frank Cass & Co., Ltd. London, 1970, P.3. P.60. PP.87-9 and P.91.

6.3. 2. The Data:

Most of the data which are considered here are derived from RBI's annual Report on Currency and Finance, RBI Bulletins, and the Economic Surveys of Government of India. The other sources are the Estimates of National Income published by the Central Statistical Organisation on behalf of the Government of India and the International Financial Statistics published by the International Monetary Fund. Some of the tests which have been mentioned earlier cannot be applied because of the absence of the type of data which would be required to carry out those tests. There is a genuine need to gather more information in this field to provide a basis for better judgement.

6.3. 3. Growth of the Linkages: The tests:

(a) To examine the nature of growth of linkages, we shall, first, consider the proportion of commercial banks' loans going to agriculture. It is revealed in table 6.1 that bank credit to agriculture as a proportion of its total loans was 2.1 in 1950-51, 3.1 in 1961-62 and 2.2 in 1967-8. Loans given by commercial banks to agriculture included loans to plantation. It seems, judged by this test, that this link between organized and unorganized sectors is very weak.

(b) The second test is to consider the proportion of lending by organized agencies like commercial banks, co-operative credit societies and the government in the total borrowing of cultivators.

It is revealed that this proportion was 7.3 in 1951-52 and 13.7 in 1961-62.¹

¹ See, RBI -A.I.R.C.S., vol.11, p.167, op cit., and also RBI.Bulletin September, 1965, P.1309.

TABLE 6.1 SOME INDICATORS OF THE SIZE OF THE ORGANIZED MARKET AND THE LINKS BETWEEN THE ORGANIZED AND UNORGANIZED RURAL MONEY MARKETS

Year	Deposit money as percentage of money supply with public	Commercial and co-operative banks' claims on private sector as percentage to national income	Institutional lending to cultivators as a proportion of their total borrowing	Commercial banks' loans to agricult- ure as proportion of total loans advanced	Advances to shroffs as a percentage of total scheduled bank advances	Advances to shroffs as percentage of total advances by non-scheduled banks	Institutional Credit as a percentage of national income generated in agricultural sector
	1	2	3	4	5	6	7
1951-2	32.55	5.55	7.3	2.1	2.0	1.1	N.A.
1961-2	27.73	10.76	18.7	3.1	1.4	1.4	2.7
1967-8	36.90	13.85	33.5 ¹	2.2*	N.A.	N.A.	3.8
1968-9	36.29	14.0	N.A.	N.A.	N.A.	N.A.	N.A.

Sources: (1) RBI - Report on Currency and Finance : 1951-52 to 1969-70.

(2) IMF - International Financial Statistics: 1963 to 1970.

(3) RBI Bulletin, Dec. 1968, and May, 1970, Sept. 1965.

(4) Government of India - Economic Survey, 1969-70 and 1970-71.

(5) RBI - Organizational Framework for the Implementation of Social Objectives (1969), Bombay, 1969, p. 578.

* Provisional : Source: RBI Bulletin, May 1970, p. 833.

¹ Only short-term loans. The stated percentage is based upon estimated total credit requirements.

Little reliable information is available about this proportion for the current period. At present, the co-operatives may be lending about one-fifth to one-fourth of the total borrowings of cultivators, but this again, will make the share of organized agencies about one-fourth to one-third of the total borrowings of cultivators.¹ In this respect, perhaps the links are growing, but the rate of growth is quite slow.

(c) It has been argued that the amount of advances by commercial banks to shroffs may be one of the indicators of the growth of links between the two sectors.² This might have been the case if the ratio (and not simply the amount)³ of commercial banks' advances to shroffs had been increasing. In table 6.1, it is shown that the proportion of advances of the scheduled commercial banks to shroffs has actually declined from 2 to 1.4 between 1951 and 1961 though the absolute amount of advances has increased. The proportion of advances of the non-scheduled banks registered a slight rise from 1.1 to 1.4 in the same period. Thus between 1951 and 1961, the proportion of advances by commercial banks to shroffs is so low and stagnant that it hardly suggests any strengthening of the links between organized and unorganized sectors.

The other tests which are applied here to depict the growth of the organized money market consist of considering: (a) the proportion of deposit to money supply and (b) the proportion of claims on the private sector by commercial and co-operative banks.

1 See, RBI - Organizational Framework...(1969), P.5.78, op cit.,

2 Gopal Karkal op cit., PP.77-8.

3 Italics mine.

By using test (a), we discover that between 1951-52 and 1961-62, the proportion of deposits to money supply went down from 32.55 to 27.73. However, in 1968-9, the proportion went up to 36.29. Hence, during the sixties, there is one indication to suggest that the size of organized money market might have increased.

The second test revealed that between 1953-4 and 1960-61, the proportion of claims on the private sector by commercial and co-operative banks to national income rose from 5.44 to 9.78. In 1968-9, it went up further to 14.0 (see table 6.1). This may again, suggest the increase in the size of organized money market.

The above tests are not enough, but they seem to suggest growth of the organized sector to a limited extent in rural money markets as reflected in the greater proportion of loans given by the organized agencies to cultivators. The size of the whole of the organized money market might have increased as shown by the 'loanable fund' and 'liquidity preference' approaches. However, in the absence of any rigorous measurement of the total size of the rural money market, it is very difficult to pass any final judgement about the exact degree and nature of change of the size of two types of rural money market in India.

6.4. 1. Role of the Organized Agencies for Promoting the Linkages:

In order to examine the role played by the organized agencies in promoting integration between dual money market; we shall firstly analyse the role of the Reserve Bank of India and secondly that of the commercial banks. Since the analysis of the workings of co-operative credit societies has already been made, no attempt is made here to examine their role again. Finally, the part which other financial agencies could play will also be described.

6.4. 2. Role of the Reserve Bank of India:

Ever since the establishment of the Reserve Bank of India (RBI) in 1935 as the Central bank, it has demonstrated keen interest in promoting integration of the different types of money market. The proposals made by the RBI for linking the indigenous financial agencies with the organized sector have already been described. It has been observed that since the basic condition of segregating banking from non-banking activities among indigenous financial agencies has not been accepted by indigenous bankers, the desired integration did not take place. Nevertheless, the RBI continued to evince interest in the problem and it was under its auspices that a massive rural credit survey was undertaken for the whole of India for the years 1951-2. The Rural Credit Survey Committee, however, declined to offer any role to the money-lenders and indigenous banks and reflected that although the co-operatives have failed, they must succeed as effective rivals of money-lenders. An integrated system of agricultural credit was supposed to be brought about by linking credit with marketing and processing activities as also by developing adequate personnel.¹ The Committee also drew attention to the need to develop negotiable credit instruments by building up warehouses and proper storage facilities.

The Indian government broadly accepted the proposals of the Rural Credit Survey Committee. The activities of the RBI increased considerably since it had to co-ordinate the work of different aspects like credit, marketing, warehousing and training.

1 See RBI - Role of the Reserve Bank of India in Rural Credit, Bombay, 1964, PP.9-12. See also, RBI - The Reserve Bank of India: Functions and Working, Bombay, 1958, PP.76-7.

Further, the RBI established the National Agricultural Credit (Long-term operations) Fund in 1956 following the recommendations of the Survey Committee. This was to provide long-term loans to different state governments to enable them to participate in the share capital of different types of co-operatives, including land-mortgage banks with an initial contribution of Rs.10 crores, and a sum of at least Rs. 5 crores was to be added each year to the Fund out of the RBI's profits in the first five years. In May,1960, the Committee on Co-operative Credit recommended that the amount of annual contribution be raised to Rs.10 crores per years in 1959-61 and to Rs.11 crores for 1961-4.¹ The same Committee(1960)also recommended the relaxation of conditions for granting credit to the credit societies by enlarging the definition of owned funds to mean not only paid-up share capital and statutory reserve fund, but also certain other reserve and funds of a permanent nature created out of profits. The RBI also established the National Agricultural (Stabilization) Fund in June, 1956, with an initial contribution of Rs. 1 crore and Rs. 1 crore being contributed to it per year since then from Bank's profits. For making medium-term advances to State Co-operative banks, loans could be obtained from the Fund to enable the co-operative banks to repay loans in case of default owing to drought, flood or natural calamities.² The reason for the creation of the Agricultural Credit Fund was mainly to provide financial support to the co-operative agencies to make them strong and effective competitors of indigenous agencies.

1 Ibid. PP.12-14.

2 Ibid. PP.16-17.

At the highest level of the co-operative banking structure, the RBI was primarily interested in setting up one State Co-operative Bank in each state and at the district level, the Bank tried to set up only one central co-operative bank for each district. At the primary level, the RBI has been trying to form viable societies. After the rural credit survey of 1950-1, the RBI carried out follow-up surveys from 1956 to 1960. The RBI also established in 1951 the Standing Advisory Committee on Agricultural Credit to review the progress of co-operatives.¹ The RBI published the Statistical Statements and reviews related to the co-operatives in India each year.

The amount of the flow of funds from the RBI to co-operatives between 1955-6 and 1967-8 is shown in table 6.2. Loans for both short and medium terms increased substantially though the proportion of highest level of loans outstanding to loans sanctioned declined from 90 to 64 and this may partly be explained by the rise in overdues. The RBI generally lends to co-operatives at rates varying between 2% and 1¹/₂% below the Bank Rate.² The RBI indirectly finances on a long-term basis by contributing to the debentures which are floated by central land mortgage banks and guaranteed by state governments.

The RBI provides cheap remittance facilities to co-operative banks. It audits and inspects the accounts of the co-operatives apart from rendering advice to them about their loans and assets adjustments and the rate of interest that could be changed. The RBI is now relaxing rules for extending more credit for the development of the Intensive Agricultural District Programme(IADP).

1 Ibid. PP.24-25.

2 Ibid. PP.30-31.

TABLE 6.2 SELECTED DATA ON THE RESERVE BANK'S SUPPORT TO CO-OPERATIVE CREDIT Rs. Crores

	1955-6	1960-61	1965-6	1966-7	1967-8
	1	2	3	4	5
Short-term accommodation:					
(i) For agricultural purposes					
(a) Limits sanctioned	30	112	213	258	324
(b) Outstandings at the end of the year (30 June)	13	101	144	135	138
(c) Highest level of outstandings		101	172	179	207
(d) Percentage of (c) to (a)		90	81	69	64
(ii) For financing handloom weavers' societies					
(a) Limits sanctioned		3	8	8	9
(b) Outstandings at the end of the year (31 March)		3	6	5	6
(iii) For Fertilizer distribution ²					
(a) Limits sanctioned				33	28
(b) Outstandings at the end of the year (31 December)				15	15
Medium-term loans for agricultural purposes:					
(a) Amount sanctioned	1	5	14	15	16
(b) Amount drawn	1	6 ²	7	8	9
(c) Amount outstanding at the end of the year (30 June)	1	9	15	15	16
Loans to state governments for share capital contribution ¹ :					
(a) Amount sanctioned (including renewals)		3	3	2	7
(b) Amount drawn		3	3	2	7
(c) Amount outstanding as on 30 June		20	29	28	32

TABLE 6.2 (continued) SELECTED DATA ON THE RESERVE BANK'S SUPPORT TO CO-OPERATIVE CREDIT Rs. Crores

	1955-6	1960-61	1965-6	1966-7	1967-8
	1	2	3	4	5
Investment in central land mortgage bank debentures:					
(a) Amount contributed to ordinary debentures	0.1	0.2	4.1	3.5	3.8
(b) Amount contributed to rural debentures		0.7	1.7	0.9	0.9
Medium-term loans by way of conversion of short-term loans					
(a) Amount sanctioned			5	9	1
(b) Amount drawn			5	6	0.1
(c) Amount outstanding at the end of the year (30 June)			5	9	6

¹ Figures relate to financial year.

² Figures relate to calendar year.

³ Includes drawings on previous year's sanctions.

Source: Reserve Bank of India - Report of the All-India Rural Credit Reviews Committee, 1969, pp. 697, op.cit.

Since one of the basic conditions for the development of this programme is the provision of adequate and timely credit to farmers on the basis of their production plans, the RBI takes into account the credit needs of the State and Central co-operative banks for financing the area included in the programme on a special footing and the central co-operative banks within IADP are permitted to ask for special credit limits. The RBI has also taken various steps for the training of personnel for co-operatives.¹ On the recommendation of the Rural Credit Review Committee(1969), the Standing Committee on Co-operative Credit was converted into Agricultural Credit Board in February, 1970.²

6.4. 3. Evaluation of the work of the RBI:

The RBI has, no doubt, tried to link the organized money market with the unorganized money markets in different ways. The attempt has been mainly of two types: (a) laying down the conditions for indigenous financial agencies to join the organized sector, and (b) strengthening the co-operatives financially and organizationally/ to make them effective competitors of money-lenders. Regarding the first approach, it has already been observed that the main condition which was laid down by the RBI for integrating the indigenous agencies with the organized sector was the segregation of non-banking from banking activities among the indigenous agencies. As the indigenous bankers refused to accept that condition, integration along these lines did not take place. The indigenous bankers may, however, be allowed to operate both banking and non-banking activities provided they keep separate accounts for the two different types of activities and the RBI will have the right to audit and inspect the accounts regularly to prevent any possible malpractice.

1 RBI - The Reserve Bank of India, PP.87-9 on cit.,

2 RBI - Annual Report, 1970, P.75. See also, Agricultural Situation in India, March, 1970, PP.1105-1106.

After a few years, the indigenous bankers could be asked to drop their non-banking activities. It appeared that one of the main reasons why the indigenous bankers refused to shed non-banking activities stemmed from their apprehension that they would not have enough business turnover to cover their costs. But this argument would be weakened once they are allowed to work on condition that they could combine banking with other activities for some years. Further, once the indigenous bankers are allowed to operate within the organized sector, the RBI will assume enough power over them to control their activities. Should any indigenous banker be found to make wrong use of the RBI loans, he may be expelled from the list of member-banks. The RBI may also take proper steps to standardize the hundis which may be used as an important linkage. Little attention has so far been devoted to the improvement of hundi business. It is also disheartening to find that the use of other types of negotiable credit instruments like warehouse receipts has not yet become popular.¹

The approach of the RBI regarding the development of co-operative credit societies is important. The RBI has liberalised many conditions for providing short and long-term finance to the rural sector. The rise in the amount of loans granted to the co-operatives between 1956 and 1968 by the RBI is substantial. The RBI has taken some useful steps towards re-organizing the co-operative structure and improving the quality and operational efficiency of co-operative banks.²

1 RBI - Report of the All-India Rural Credit....(1969), PP.927-29, op cit.,

2 Ibid. P.698. It is stated that deposit insurance scheme was introduced in the case of co-operative banks in 1965 and State Co-operative banks were given the status of scheduled banks in 1966.

But the important point which may be raised here is that although the RBI was, to some extent, successful in injecting funds into the rural sector through co-operatives, it has also created a built-in bias, making co-operative banks more dependant upon the RBI. It has been mentioned that the RBI lends to co-operative banks at 2% below the Bank Rate. But the borrowing, ie, deposit rate of co-operatives was higher than the rate at which they could borrow from the Bank.¹ It may be argued that the built-in bias in favour of being dependant upon the RBI may adversely affect the keenness of co-operatives to mobilize deposits. Altering loan rates on RBI loans may affect the deposit gathering power of co-operatives. Here a system of incentives and dis-incentives may be created to reward those banks (say, by allowing them to borrow at the rate of 2% below the Bank Rate) which are successful in mobilising deposits and by imposing penalties on those banks which fail to mobilise deposits by charging a rate (say, 1% below the Bank Rate). Similar other measures may be adopted to provide incentives for deposit mobilisation.² After all, the case for subsidizing the co-operative sector at the cost of the rest of the economy for an indefinite number of years, does not seem to be very convincing on economic grounds.

1 Ibid. P.716 and PP. 728-9.

2 Ibid. PP. 729-32. See also, Harold A.Miles, "Outlook for Farm Credit in India" in YOJANA, vol.XIII, No.20. October, 1969, PP.11-12. Miles argued in favour of raising both deposit and lending rate.

However, should there be another agency to lend to the co-operatives then the degree of dependence on the RBI may be reduced. In view of the success of the commercial banks in mobilising deposits it seems possible that these commercial banks may undertake the task of financing the co-operatives. This could form an important linkage between the commercial and co-operative banks. There is special room to develop a type of co-operative paper in areas which are included in IADP and HYV projects where the demand for credit is expected to rise and the RBI may take appropriate measures to inject more funds in those areas by relaxing the rules for granting credit.¹ But such relaxation must be combined with satisfactory performance in the repayment and here a flexible loan policy to take care of seasonality is required.

In fine, in order to bring about greater integration of the dual money market, the RBI may take the following steps:

- a) remove the impediments in the way of greater use of hundis by taking steps to improve the quality of hundis;²
- b) ensure greater flow of funds through the IADP and HYV projects via the co-operatives;³
- c) develop greater use of agricultural bills by promoting the use of warehouse receipts or other forms of negotiable credit instruments;
- d) create conditions so that the commercial banks may provide more funds to co-operative banks on the basis of, say, co-operative paper;

1 See, Report of the Fertiliser Credit Committee(1968), P.228, cited in the RBI Report of the All-India Rural Credit Review Committee, (1969), P.721, op cit., See also, Government of India:Ministry of Food, Agriculture,Community Development and Co-operation - Reports of the High-Yielding Varieties Programme,New Delhi,1967,PP.55-7.

2 It is argued that the RBI should try to bring hundi into the Bill market scheme. See,for example,H.N.Roy, op cit.,P.91.

3 For a discussion of the difficulties that the RBI faced in executing this policy, See,RBI - Studies in Agricultural Credit, Bombay, 1970, P.51.

e) Formulate credit policy in such a way as to take care of the element of seasonality in the sphere of agricultural finance;

f) relax some of the conditions (for a fixed number of years) which it initially stipulated for the entry of indigenous bankers:

It may, however, be admitted that there is a built-in bias in the loan policy of the RBI in favour of borrowing by co-operative banks. Such bias may be removed through a scheme of incentives and dis-incentives by altering the loan rates of the RBI. The RBI may also formulate a differential interest rate policy in the rural sector. To attract more deposits from rural areas, the primary credit societies may be asked to raise the borrowing rate.¹ This will, however, push up the lending rate as the margin of profit will be squeezed. Nevertheless, in view of the fact that the money-lenders' rate may still be higher than the increased lending rate, there seems to be room for considering the case for increasing the lending rate. The exact level of such rates in different regions may be worked out by the RBI. As regards the problem of strengthening the co-operatives as alternative agencies of rural credit, every attempt should be made by the Bank to examine carefully and to take measures to improve upon operational efficiency, loan administration and scale of activity of primary credit societies as well as of central co-operative banks. This may require a greater role by the RBI in the management of Co-operative credit societies.

1 See, for example, Anand G. Chandavarkar, op cit., IMF Staff Papers March, 1971. PP.48-52.

6.4. 4. Role of the Commercial Banks:

The commercial banks have hitherto played a very insignificant role in the field of agricultural credit.¹ The commercial banks, however, could provide funds to the rural sector in a number of ways: (a) by granting credit to the co-operatives; (b) by increasing the scale of their activities through the opening of more branches, and, (c) by providing production, investment and distribution credit.

It is argued that commercial banks were more successful than the co-operatives in mobilizing deposits in the semi-urban areas.² The results of the special survey conducted by the RBI revealed that the number of accounts in respect of advances the co-operatives formed only less than 1 per cent of the total number of accounts and about 1 per cent of the amount lent in all the centres studied.³ This demonstrates a very weak link between the commercial and co-operative banks in the sample surveyed. There are, however, two problems in connexion with commercial banks lending to co-operatives.

First, since the RBI lends at a concessional rate to co-operatives, it becomes doubtful how far the co-operatives will turn to the commercial banks, which will not charge such concessional rates, except when the co-operatives suffer from an acute shortage of funds.

Secondly, since some of the co-operatives have failed to utilize the credit limits sanctioned by the RBI chiefly because of their mounting overdues, it is not certain whether these co-operatives will make demand for additional credit requirements.⁴

1 See, for details, RBI-Financing of Agriculture... (1969) on cit., See also, G.T. Huchappa, "Commercial Banks and Agricultural Finance" in The Asian Economic Review, vol. X. No. 3. May, 1968, PP. 201-210.

2 See, RBI-Report of the All-India Rural Credit... (1969), P. 331. on cit.,

3 Ibid. P. 334.

4 RBI- Financing of Agriculture... (1969), P. 219, on cit.,

Nevertheless, commercial banks may still lend to co-operatives for financing distribution, storage, marketing and rural electrification. Where opportunities exist, there is no reason why the links between commercial banks and co-operatives should not improve.

As regards the expansion of the scale of activities of commercial banks, it may be said that the expansion of rural banking has achieved some success.¹ The story of rural branch expansion should, however, be interpreted cautiously because many of these branches are established in semi-urban and newly urban areas. Between 1955 and 1967, the scheduled commercial banks including the State Bank of India and its subsidiaries were successful in opening up 3803 offices of which 1189, ie, 31% were opened in those centres which did not have any commercial banking facilities before, though such centres might have offices of co-operative banks. The comparison here between the State and commercial banks appear to be revealing in the sense that in the case of the State Banks, between 1955 and 1967, 48% of the new offices opened were in unbanked centres whereas in the case of scheduled banks, the equivalent figure is only 21%. However, the progress with regard to branch expansion by the State and commercial banks during 1968-9 was regarded as significant.² Despite such expansion, there is still a considerable number of districts without banking facilities.³

1 See, P.N.Joshi, "Banking in Rural India" in The Journal of Indian Institute of Bankers vol.40.No.1.January-March,1969,PP.40-41.

See also table, 6.4. See also, RBI Bulletin (Supplement), November, 1970.

2 RBI-Report of the All-India Rural Credit... (1969), PP.329-31, op cit.

3 See, V.M.Jakhade and H.B.Shivamaggi, "Inter-District Comparison of Agricultural Development and Spread of Banking Facilities in the Rural Areas" in RBI Bulletin, October, 1969, PP.1559-1615.

There is also a marked degree of unevenness in the spread of banking among the different states. It is reported that "none of the districts from Andhra Pradesh, Assam, Bihar, Haryana, Orissa, Uttar Pradesh and West Bengal falls in the group of top 50 districts ranked for spread of banking according to the per bank centre position. On the other hand, 8 out of 9 districts in Kerala, 15 out of 25 districts in Maharashtra, 9 out of 17 districts in Gujarat and 6 out of 19 districts in Mysore fall in this top group".¹

There is also considerable scope for commercial banks to expand their branches in those districts which are agriculturally relatively well-developed but suffer from inadequate banking facilities.²

Other linkages could be developed if the commercial banks could lend more to the rural sector directly or indirectly by providing investment, distribution and marketing credit. Traditionally, the commercial banks, have financed urban biased trade and industry and neglected the agricultural sector, though in recent times they have provided some loans for agricultural purposes.³ The diversion of a small proportion of loans to agriculture was not unlikely since the commercial banks did not possess any expert knowledge about the rural economy nor did they have strong connexion with indigenous financial agencies working in the rural sector.

1 Ibid. P.1574.

2 Ibid. P.1575.

3 RBI - Report of the All-India Rural Credit...(1969), PP.335-36, op cit., See also, J.S.Varshney, "Financing of Co-operatives by the State Bank of India and its Subsidiaries" in State Bank of India Monthly Review, vol.VIII, No.7. July, 1969, PP.233-39.

Nonetheless, the commercial banks provided loans to traders in agricultural goods and contributed to the debentures of central land development banks. But the beneficiaries of commercial banks' lending were mostly the plantation estates and big farmers who operate on business lines.¹

Direct financing of agriculture by commercial banks posed many problems because of the long gestation period in the returns on agricultural investment, wide fluctuations in agricultural income and prices, the absence of proper records of land ownership and of other good collateral.² Indeed, the basic problem is related to the nature of economic growth and rise in farmer's income. Once the farmer's income is raised above the level of subsistence, it will be possible for the cultivators to save and accumulate assets which could be used as good collateral. In this context, promotion of agricultural bills deserve special attention. Here, mainly three types of agricultural bills may be promoted: (a) warehouse receipts, (b) co-operative paper, and (c) hundis. The growth of such bills will minimise the degree of risk in agricultural lending, reduce the risk premium and ensure greater flow of funds. The point is thus, how best commercial banks can provide production and investment credit that will increase farmer's income and repayments as well as rural deposits.³

1 Ibid. P.336.

2 See, for example, A.H.Elias, "Operational Problems of Commercial Banks in the Rural Sector" in The Journal of the Indian Institute of Bankers, vol.37, No.3. July, 1966. PP.240-41. See also, P.N.Joshi, op cit., P.42. See also, D.K.Rangnekar - Agricultural Finance... P.5 op cit.,

3 The banks may have to study saving-investment behaviour in selected rural areas through low-cost branches. See, for example, Subhas J. Rele, "Strategy for Rural Banking" in YOJANA, vol.XIII, No.13, July, 13, 1969. See also, D.K.Rangnekar - Agricultural Finance... PP.10-11 op cit.,

It seems plausible that with the spread of IADP and HYV projects, the demand for fertilizers, seeds, pumpsets etc., will rise substantially over the next few years. Commercial banks here could play an important role in providing credit for distribution of these inputs which have direct production and income effects. Some of the commercial banks are already undertaking such types of financing though the scale of activity may be increased substantially.

To illustrate the ways in which commercial banks may lend directly to agriculture, the experience of the Syndicate Bank deserves attention. The Syndicate Bank in 1964 established an Agricultural Finance Department to carry out research into production possibilities in some rural sectors via improved methods of cultivation with credit aid as a first step towards direct financing of agriculture. Experimental farms were set up for demonstrating the production and income-effects and soil-testing laboratories were established to assist the farmers to determine fertilizer requirements. These measures helped the Syndicate bank to accumulate experience and diversify its activities in the rural sector. The bank began to provide loans for financing the raising of hybrid seeds and purchase of different types of agricultural machinery. Generally, 75% of the total value of machinery is financed and money is sent to the supplier of the machinery directly on the receipt of the delivery of goods. The interest rate varied between 8 and 9 per cent per annum. In South Canara district, the small farmers are issued 'Agri Cards' which helped them to obtain required seeds, fertilisers, pesticides and the spare parts for machinery from approved dealers on credit.

Dairy, poultry and fishery development schemes are also financed by the bank and it also provided services through trained farm representatives.¹ Of late, the State Bank has also directly financed two agricultural projects.²

The major lines of approach which emerged in the course of our discussion for the future role that commercial banks can play for the promotion of links between organized and unorganized sectors are the following:

- a) Greater financing of co-operative credit societies by developing some co-operative bills.
- b) More active role in the direct financing of agriculture by helping the cultivators to buy inputs against hypothecation or mortgage of such inputs as well as by lending on the basis of crops.³
- c) Greater indirect financing for the distribution of inputs like fertilizer as well as for the promotion of services and extension in rural areas. Here, apart from developing warehousing, processing and storage facilities, the lead bank scheme may be introduced to promote the link between credit and marketing.⁴

1 RBI-Report of the All-India Rural Credit...(1969)PP.338-9, op cit., See also, RBI - Financing of Agriculture...(1969),PP.160-67, op cit.,

2 T.R.Varadachary, "State Bank Assists to Green Revolution" in State Bank of India Monthly Review, vol.VIII, No.3. March, 1969.PP.92-99.

3 RBI - Report of the All-India Rural Credit...(1969),PP.927-9, Op cit., It is reported that banks do not consider the warehouse receipts as negotiable instruments. Here is a case for clarifying the legal problem to facilitate the use of such receipts. For some defects of the crop-loan system, see, S.N.Jatar, "Operations of the Crop Loan System in Maharashtra" in Artha Vignana, Vol.XI.No.4. December, 1969, PP.611-50.

4 See, G.A.Pai "Regional Distribution of Bank Credit: A Critical Review" in Economic and Political Weekly Vol.V.No.41.October 10,1970. PP.1691-1699.

- d) Increasing the scale of financing by opening up new branches.¹
- e) Higher provision of funds in IADP and HYV areas as these are the leading sectors in the rural economy. Here credit may also be supplied in kind but this requires an efficient distributive mechanism.²
- f) Larger contribution to the State Electricity Boards for enabling them to implement rural electrification programmes.

In some recent reports, it is suggested that there had been a considerable rise in the commercial bank's lending to agriculture.

What is now necessary is proper co-ordination between commercial and co-operative banks and their joint and positive role for greater integration of the dual money market. The short-run effect of commercial banks' increasing participation in the rural economy may lead to a flow of funds from urban and semi-urban to rural areas. In the long-run, such flow of funds is expected to increase the degree of monetization of the rural economy, create a greater volume of financial assets in rural areas and thereby enable the banks to mobilize a financial surplus which would emerge with the rise in farm production and income. However, to find out the viability of the new branches in semi-urban and rural areas, commercial banks may have to undertake cost-benefit studies.³

1 See, RBI Bulletin, April, 1969, PP. 529-30. Expansion may, however, require functional and structural adaptation. See, for example, N.P. Kurup, "Banking in the Fourth Plan: Adaptations to meet new Challenge" in VOJANA, Sept. 1, 1968, P. 8. Schemes for structural re-organization have also been drawn up. See, for example, N.M. Choksi, "Structural Re-organization of Indian Banking: A Scheme" and F.K.F. Nariman, "Rural Branch Expansion" in RBI-Organizational Framework... (1969), PP. A.34 - A.45, on cit.,

2 See, Economic and Political Weekly, vol. IV, No. 37, Sept. 13, 1969, P1466.

3 See, V.M. Jakhade and M.V. Gadgil, "Production-and-Repayment-Capacity Oriented Lending for Farm Investment" in RBI Bulletin, January, 1970, PP. 56-77. For a critique, see, Samuel Paul, "Investment in Agriculture: A Cost-Benefit Analyse" in Economic and Political Weekly, vol. V, No. 2, May, 16, 1970, PP. 808-811. See also, M. Narasimham, "National Agricultural Credit Policy" in Economic and Political Weekly, vol. VI, No. 2, January 9, 1971, PP. 101-102. Narasimham warns that "credit creation beyond a point has inflationary potential", P. 102.

Such studies may be useful in arriving at decisions related to the scope of branch expansion programmes because there is a danger in stretching the branches too far for financial and administrative reasons.¹ However, apart from the commercial banks, some other organized financial agencies have recently been established and in the next sections, their role will be examined.

6.4. §. Role of Agricultural Finance Corporation:

The Agricultural Finance Corporation (AFC) was set up in April, 1968 with an authorized capital of Rs.100 crores, to supplement the work of the co-operatives as well as of the commercial banks, in order to ensure a greater flow of funds to the rural sector. At the beginning, Rs.10.crores have been issued out of which Rs.5 crores have been paid up. The major aims of the Corporation are to help the financing of:

- / a) the distribution of agricultural output and inputs like fertilizer, pesticides and agricultural implements;
- b) the development of markets, warehouses, food industries and forest products;
- c) promotion of livestock;
- d) production, supply and distribution of agricultural goods.²

The AFC can provide credit both directly and indirectly. Direct financing to cultivators for production was limited to only a few selected areas. The major aim of AFC is to develop the infra-structure for the growth of the agricultural economy.

1 See,V.R.Pillai, "Partial Nationalisation not Enough" in Government of India,Ministry of Information and Broadcasting, Nationalisation of Banks,1970, PP.12-17. For an 'action-oriented' programme,initial policy formulation by Lead Banks on the basis of available data and 'personal feel' is regarded necessary. See,for example, V.V.Bhatt, "Lead Banks:Action Oriented Approach " in Economic and Political Weekly,vol.4.No.40,Oct.3,1970,PP.1639-1641. For progress of Lead Bank Scheme,See,RBI.Bulletin Nov,1970. PP.1917-1928.

2 RBI-Financing of Agriculture...(1969).PP.228-32, on cit.,

The main schemes financed by the AFC so far included energization of irrigation wells in some states like Andhra Pradesh, Haryana, Bihar, area development in some regions of Bihar, reclamation of sandy soil and production of an export variety of banana in Tamil Nadu.¹ The AFC has also established "national, state and district level consultative committees for co-ordination between the co-operative and the commercial banks, developing the expertise of the member-banks in dealing with agricultural loan applications, formulating projects...for the benefit of member-banks and establishing a technical consultancy service for helping the banks to appraise and finance agricultural projects".²

The AFC is established not only as an agency for financing agriculture directly and indirectly, but also for promotional activities. It appears that the AFC is in a vital position to play its role as the co-ordinator of many agricultural financing agencies, apart from being a source of funds for the rural sector.³ It is, however, too early to judge how far the AFC has played its role in expanding the organized sector of the rural money market.

6.4. 6. Agricultural Credit Corporation:

In view of the limited progress of the co-operative credit societies in some of the Indian states, an Informal Group on Institutional Arrangement for Agricultural Credit was set up by the RBI in 1964 and this group recommended the establishment of an Agricultural Credit Corporation (ACC) in each of the states of Bihar, Assam, West Bengal, Orissa and Rajasthan and different corporations for the Union Territories of Tripura and Manipur.

1 RBI-Report of the All-India Rural Credit (1969)...PP.341-42, PP.600-601, op cit.,

2 Ibid. P.342.

3 The need for co-ordination is also stressed by other writers. See, for example, P.K.Bhargava and A.K.Jain, "Changing the Structure of Agricultural Finance in India" in Agricultural Situation in India. November, 1970. PP.829-35.

The Indian Government accepted the proposal and passed the State Agricultural Credit Corporation Bill in 1968. The Act permitted a Corporation to be set up in any state or union territory on condition that no corporation can be set up in the states or territories save those stipulated by the Group except with the prior approval of the RBI and the central government.

The fund of the ACC would consist of the contributions of the RBI, the State Bank, Food Corporation of India and the banking companies which will be the shareholders of ACC. With the approval of the RBI, the ACC might take deposits from the local authorities, government or any other person. A board of seven directors will be responsible for its management, appointed by the central government in consultation with the State government.

The ACC may provide loans up to a period not exceeding five years for agricultural operations to cultivators and also for agricultural marketing and processing societies, central co-operative banks, co-operative farming societies and primary agricultural credit societies. The ACC is also authorized to act as an agent for carrying out marketing and distribution functions. The RBI will have the right to inspect and determine loan policies and interest rates, provide general guidance and make periodic review of its working every three years. Areas were demarcated for the proper functioning of ACC in co-ordination with central co-operative banks. However, in this sphere, it is necessary to avoid overlapping of functions and close co-operation is needed with the State Co-operative banks. Sufficient flexibility in demarcating the area of operation of the ACC is regarded as necessary.¹

1 RBI-Report of the All-India Rural Credit...(1969).P653.op cit.,

Similar flexibility in determining the norms of potential viability of credit societies is also required. In disbursing loans, the ACC should try to lend to cultivators first as a member of the group and then as a member of co-operatives. The ACC must be careful about loan utilization and recovery of such loans. It should however, enjoy those rights and privileges which are now enjoyed by the co-operatives. The ACC should take active steps to link credit to marketing.¹ Needless to say, to function smoothly, utmost co-operation is required between the ACC, Co-operatives and government agencies.

The idea of setting up the ACC in those states where co-operatives did not make good progress is not unreasonable.

However, little information is available until now about the nature and scale of activity of the ACC. In connexion with their work, the following points deserve special attention:

- a) Maximum co-operation and co-ordination is required between the ACC and other organized financial agencies to ensure flow of funds in the rural sector.
- b) Overlapping of functions should be avoided as far as possible to avoid any damage to the growth of co-operatives.
- c) It is extremely important to minimise the problems of loan administration. This is one of the major problems that the co-operatives have faced so far. This could be done if strict supervision is maintained over loan utilization and loan recovery.

In the case of all these agencies, there is no provision for taking special care of small farmers who are generally deprived of organized credit facilities. In the next section, we shall examine the attempt that has been made to remove a part of that criticism.

1 Ibid. PP.653-57.

7/6.4. Small Farmers Development Agency:

The Small Farmers Development Agency (SFDA) has been recommended by the All-India Rural Credit Review Committee(1969) as an organization which should be set up for the benefit of those cultivators who own small holdings yet potentially viable if they can get necessary inputs by obtaining credit.¹ The scheme does not include the sub-marginal farmers and agricultural labourers. The SFDA is recommended to be set up in some 30 districts as pilot projects particularly where the proportion of small farmers is quite large and which are included in IADP or HYV projects and where co-operative credit societies are working satisfactorily.² Broadly, the SFDA will investigate and identify the problems of small farmers to enable them to obtain necessary inputs and services from the different organized agencies like co-operatives as also to ensure the implementation of these plans by proper supervision to raise farmer's production and income. The Central Co-operative and Land Development banks will obtain substantial funds from SFDA for disbursing credit to small farmers as well as for their effective supervision. It is hoped that the scheme would benefit 1.5million farmers in 30 districts by 1973-4.³ The scheme has been included in the Fourth Five Year Plan.⁴

1 Ibid. Ch.18. PP.537-89. See also, Government of India - Fourth Five Year Plan, 1969-74, New Delhi, 1969, P.151.

2 Ibid. P. 584.

3 Ibid. PP.587-89.

4 By June, 1970, eight such agencies in four states were approved, See.RBI - Report on Currency and Finance,1969-70,P.116.

The idea of helping the small farmers through SFDA is interesting. The establishment of SFDA would not only form one link in the chain of organized flow of funds to the rural sector, but also involve socio-political implications in so far as it seeks to redress one of the basic grievances of small farmers: that they are generally deprived of institutional credit. What is no less important is the effective utilization of funds and its repayment through necessary production and income-effects of credit.¹

6.4. Impact of the Organized Agencies upon The Rural Money Market:

The discussion of the establishment of a number of organized agencies like ACC and AFC² and the expansion of the activities of commercial banks in rural money markets begs the question of their impact upon the unorganized sector. It seems probable that the increasing scale of loan operations undertaken by the nationalized commercial banks as also by the State Bank will lead to a fall in the size of the unorganized rural money market. Between 1961-62 and 1968-9, as a proportion of national income, commercial and co-operative banks' claims on the private sector went up from 10.76 to 14.00. Between 1951-2 and 1961-2, the proportion of cultivators' borrowing from all the organized agencies went up from about 7 to about 18 and this figure was, perhaps, 33 in 1967-8.

1 See, for example, Henry W. Fairchild, "Improving Institutional Farm Credit Systems to Support Rapid Agricultural Development" in FAO. of the United Nations - Monthly Bulletin of Agricultural Economics and Statistics, vol.19, No.4, April, 1970, PP.1-7. The writer particularly emphasized the problem of collecting loans as one of the main weaknesses of institutional credit system in underdeveloped countries.

2 The analysis of the workings of the Agricultural Refinance Corporation is not made here because this agency mainly provides medium and long-term loans to agriculture. For details, see RBI - Report of the All-India Rural Credit...(1969), PP.800-818, op cit.,

The proportion of total credit made available by institutional agencies in the estimated total credit requirements was 33.5 in 1967-8. In 1961-2, this was only 18.6. However, institutional credit as a percentage of national income originating in agricultural sector was 2.7 in 1961-2 and 3.8 in 1967-8. All these indications may suggest a relative growth of the organized sector though it must be admitted that it is extremely difficult to estimate this relative growth because of lack of reliable and precise data on the total size of the rural money market. It should also be reckoned that the establishment of different types of organized agencies in the rural sector has the potentialities of being transformed into important linkages between organized and unorganized sectors. What is desirable is proper co-ordination of the different agencies and their sound management. A multi-agency approach is required not only to promote linkages, but also to develop competition which will render credit allocation more effective and efficient by compelling the different agencies to become more viable. Greater efficiency of the organized agencies and stronger linkage may require a realistic appraisal of their interest rate policy and this may necessitate a raising of both deposit and lending rates for optimum credit allocation.¹

Given the estimated demand for credit in Indian agriculture in the near future, it seems unlikely that the entire demand could be met by organized agencies.²

1 See, Anand G. Chandavarkar, op cit., IMF Staff Papers, March, 1971, PP. 60-72. "The maintenance of nominal interest rates in the organized sector below their true economic level results in a steady attrition of organized finance". P. 72. See also, Gunnar Myrdal - Asian Drama, vol. III, Pantheon, New York, 1968, appendix, 8, P. 2095. The author argues in favour of raising interest rates in the organized sector substantially to break the financial dualism. See also, H. Myint - Economic Theory and the Underdeveloped Countries, Oxford University Press, Inc. U.S.A. 1971, P. 331.

2 RBI - Report of the All-Indian Rural Credit... (1969) PP. 81-96 op cit.

This implies a greater scope for utilising the existing agencies to a fuller extent and to develop other types of linkages.¹

Promotion of such linkages may not only be helpful in mobilising the financial surplus, but also, in rendering monetary policy more effective in the organized sector.

6.5. Conclusions:

The following conclusions may be drawn on the basis of our present analysis:

a) There is considerable difficulty in measuring the exact nature of the unorganized rural money market in India and its linkages with the organized money market because of the nature and inadequacy of data.

b) The rough estimates which are used here reveal that the links between the organized and unorganized sectors are weak and the size of the unorganized money market is probably declining though the rate of decline is very slow. Again, some of the linkages which were expected to be developed did not show appreciable growth. Any firm judgement about the nature and rate of decline of the size of unorganized market must depend upon more rigorous analysis of further empirical evidence of the total size of the rural money market and such judgement cannot be passed with the evidence available up until now.

1 See, S.Kesava Iyengar, "The Co-operative Caravan: A Casual Causerie" in The Asian Economic Review, vol.XI, No.4, August,1969, PP.363-404, especially, P.403. The writer makes a special plea for abolishing intermediaries between primary credit agencies and the ultimate borrower.

c) It appeared that although the RBI is aware of the problem of integration, it has not taken sufficient steps either for the promotion of hundis or for the entry of indigenous bankers within the organized sector. The RBI may, perhaps, lay down more flexible conditions for the entry of indigenous bankers. In view of the increasing demand for credit in coming years with the technological changes taking place in Indian agriculture, the RBI may take appropriate measures for the promotion and development of hundi business which may form a very important linkage.

d) The role of commercial banks in the rural money market was poor though some expansion of their activities has been observed recently. There seems to be room to ensure a flow of funds to the rural sector from commercial banks directly or indirectly via the co-operatives against the creation of co-operative bills. Direct financing by commercial banks may be preceded by careful farm planning and feasibility studies by their agricultural credit departments.

e) It is too early to judge the impact of the activities of newly established organized agencies on the rural money market. The establishment of these agencies may be regarded as desirable in view of the poor performance of the co-operatives in some of the Indian states and low absorptive capacity of the agricultural sector.¹

1 See also, Horace Belshaw, op cit., in Elizabeth K. Bauer(ed)-Proceedings, op cit., PP. 551 - 552.

CONCLUSION:

The major conclusions of our study are summarised briefly in the following paragraphs:

(1) The Indian rural money market is characterised by duality with organized and unorganized sectors in the market. On the supply side, the unorganized sector largely dominates even today notwithstanding some growth of the organized agencies between 1951 and 1968 as it still supplies about two-thirds of the total borrowing of the cultivators. The nature, composition and operation of both sectors illustrated a good deal of contrast and positive steps are required to promote their integration.

(2) The pattern of borrowing and debt remained broadly the same between 1951-2 and 1961-2. One of the important conclusions which followed on the basis of our statistical estimates of the factors affecting the demand side of agricultural credit is that it is capital rather than family expenditure which is the more significant explanatory variable affecting the demand side in most periods of our study. This may imply that higher levels of borrowing and debt are correlated with larger capital expenditure while lower levels of borrowing/debt are correlated with greater family expenditure at both state and district levels. Evidence also suggested the great importance of personal security against which loans were either borrowed or outstanding in all periods. This implied the dearth of different types of collateral in the agricultural credit markets and the desirability of diversifying the nature of cultivators' assets with the promotion of their income and wealth. However, seasonality was observed in both borrowing and debt and this may imply the necessity of adopting a flexible credit policy.

(3) No definite conclusion could be drawn on the changes in the duration of borrowing between 1951 and 1962 because of lack of data.

However, the tendency to incur relatively more intermediate rather than short-term debt in 1961-2 in comparison with 1951-2 has been observed in our study.

(4) Little change in the pattern of borrowing and debt was observed when it was classified according to interest rates.

(5) The hypothesis that rural interest rates in the Indian economy are always very high is not generally substantiated on the basis of our study. The average rural rate varied between about 17 per cent and 15 per cent between 1951-2 and 1961-2. As the price level during this period went up by about 30 per cent, the fall in the real rate must have been higher. However, interest rates higher than 20 or 30 per cent did exist in some areas.

The analysis of the cost side of interest rates showed that such rates could largely be explained by the risk and uncertainty and administrative cost involved in lending to agriculture. Monopoly profits in rural rates might have existed only in some cases.

(6) The hypotheses about positive correlation between income and repayments and negative correlation between rate of interest and income and repayments are empirically justified though there is room for further investigation. Further, the level of interest rate was inversely related to the degree of monetization of the rural economy.

(7) Although the relative difference between the Bombay Bazaar rate and Bank Rate did not diminish substantially between 1951 and 1968, such reduction appeared to be significant so far as the difference between the Bank Rate and the Calcutta Bazaar rate is concerned. The relative difference between the hundi rate and Bazaar rates in both Bombay and Calcutta seemed to have declined substantially.

(8) At the early period of our study, the Bombay Bazaar rate remained higher than the Calcutta Bazaar rate though by 1966-7, such difference vanished either because of greater flow of funds between the two markets or because of changed economic conditions in either Bombay or Calcutta. The econometric analysis of the association between Bazaar rate and Bank Rate indicated that it is perhaps more likely that Bank Rate influenced the Bazaar rate more significantly while the influence of Bazaar rate upon Bank Rate appeared to be insignificant. This could imply that a section of the unorganized money market is influenced by the organized money market.

(9) It is argued that a rise in the farmer's income will enable him to accumulate more and better types of assets the use of which in the loan market is expected to reduce the rural interest rate by reducing the risk-premium and monopoly profit wherever it exists. Risk-premium may also be reduced by diversification of assets, adoption of improved technology and crop insurance.

(10) As regards the operations and progress of the primary agricultural credit co-operative societies, it was observed that their growth was marked by unevenness between 1951 and 1968. From the all-India standpoint, the primaries generally failed to satisfy the different criteria of financial viability so far as the composition of their financial structure and loan operations are concerned. Increasingly greater dependence on borrowing, failure to mobilise deposits appreciably as well as mounting overdues became their chief problems although they might have been partly successful in some states in granting more loans as well as in covering more villages. The basic weaknesses of the workings of the credit societies thus lie in the poor quality of loan administration and management as well as in the inability to mobilise deposits.

Considerable regional variations were observed in the operations of the primary credit societies and in states like Gujarat, Maharashtra and Punjab, credit societies appeared to be in much better shape than those in Assam, West Bengal and Bihar. This underlines the necessity to reorganise these societies on a more viable basis as well as to strengthen them through the activities of other types of financial agencies in the lagging states. The co-operatives also failed to link appreciably the system of credit and marketing and this failure considerably weakened the task of promoting necessary integration between organized and unorganized money markets.

(11) The measurement of the precise nature and size of the unorganized Indian rural money market with its links with the organized sector proved to be very difficult because of the paucity of adequate reliable data. The rough estimates which we have made probably suggested some slow decline in the size of the unorganized market though this conclusion should be regarded as tentative and subject to further rigorous tests on the basis of fresh data as this becomes available. The links between the two sectors did not appear to be improving strongly. Here the role of the Reserve Bank of India has been criticised on the ground that it did not take adequate steps either to promote hundis or to make the entry-rules of the indigenous financial agencies within the organized sector, sufficiently flexible. Similarly, the commercial banks' approach to the agricultural sector, until very recently, has been considered as conservative and it is argued that an important linkage may be developed should the commercial banks start financing the co-operatives on the basis of some co-operative bills.

Other ways to improve linkages could also be developed by increasingly more direct financing by the commercial banks in selected areas after making necessary farm planning and by setting up organized financial institutions to help directly and indirectly the agricultural sector. Here it is very necessary to ensure productive use of funds by more efficient loan administration and supervision and greater co-ordination with other financial agencies. Active steps should also be taken to promote the quality of hundis. It is possible that a multiple-agency approach will be quite useful to promote further integration.

TABLE A3.1 AVERAGE NET SAVING (EXCLUDING CURRENCY), NET INCOME, WEALTH AND SIZE OF HOUSEHOLDS OF RURAL HOUSEHOLDS BY
INCOME CLASS : 1962

Income Class (Rs.)	Average net Saving (Rs.)	Average net Income (Rs.)	Average Wealth (Rs.)	Average Size of households (Nos.)	Weighted Percent of households (%)	Saving/Income Ratio
	1	2	3	4	5	6
1. up to 360	-13	222	310	2.3	6.52	-0.059
2. 361 - 480	-36	426	289	3.7	7.12	-0.084
3. 481 - 600	-26	545	367	3.8	9.67	-0.048
4. 601 - 720	-24	663	364	4.5	9.87	-0.036
5. 721 - 900	-4	810	497	5.0	13.42	-0.005
6. 901 - 1,200	-3	1,043	632	5.5	16.02	-0.003
7. 1,201 - 1,800	40	1,464	989	6.1	18.94	0.027
8. 1,801 - 2,400	124	2,078	1,654	7.2	8.27	0.060
9. 2,401 - 3,600	252	2,886	2,579	8.0	5.76	0.087
10. 3,601 - 4,800	400	4,105	3,780	8.0	2.30	0.097
11. 4,801 - 7,200	1,088	5,727	5,574	9.0	1.23	0.190
12. 7,201 and above	1,993	12,370	12,029	9.2	0.88	0.161
13. All Income Classes	63	1,328	1,013	5.4	100.00	0.047

Source: National Council of Applied Economic Research - All-India Rural Household Survey:
Saving, Income and Investment, vol. II, New Delhi, 1965.

TABLE A3.2 AVERAGE AMOUNT BORROWED PER FAMILY CLASSIFIED ACCORDING TO PURPOSE (in rupees) : All cultivators : 1951-52.

District/Group	Total Borrowings	Family expenditure on Farm	Capital expenditure on Farm	Current expenditure on Farm	Non-Farm business expenditure
	1	2	3	4	5
1. Kamrup (Assam)	145	62	46	1	32
2. Tripura (Tripura)	136	52	69	1	8
3. Malda (W. Bengal)	155	80	35	6	33
4. Burdwan (W. Bengal)	140	109	16	3	8
5. Midnapore (W. Bengal)	118	86	23	2	2
6. Palamau (Bihar)	126	37	26	28	17
7. Mirzapur (U.P.)	135	49	18	58	1
8. Ballia (U.P.)	120	73	20	13	2
9. Kanpur (U.P.)	213	109	71	3	6
10. Agra (U.P.)	302	155	120	2	12
11. Sirmoor (Himachal Pradesh)	109	57	28	6	5
12. Jullundar (Punjab)	254	99	135	3	5
13. Hissar (")	138	91	32	5	4
14. Bhatinda (PEPSU)	436	221	101	6	1
15. Mohindergarh (PEPSU)	409	275	107	17	3
16. Jaipur (Rajasthan)	359	177	177	1	1
17. Saruai Madhopur (Rajasthan)	337	140	121	58	15
18. Jhabua (Madhya Bharat)	122	81	21	7	5
19. Shajapur (")	358	204	75	56	6
20. Raisen (Bhopal)	163	59	75	22	1
21. Satna (Vindhya Pradesh)	72	40	28	1	1
22. Rewa (")	116	49	39	10	3
23. Bilaspur (Madhya Pradesh)	84	46	28	6	1
24. Chanda (")	174	82	39	24	6
25. Nagpur (")	195	53	78	42	3
26. Serath (Saurashtra)	238	180	55	2	1
27. Ahmedabad (Bombay)	370	132	190	44	1
28. Broach (")	306	132	66	96	1

Source: RBI - All-India Rural Credit Survey, Vol. III, Bombay, 1956, pp. 294-308.

TABLE A3.2 (continued) AVERAGE AMOUNT BORROWED PER FAMILY CLASSIFIED ACCORDING TO PURPOSE (in rupees) : All cultivators : 1951-52.

District/Group	Total Borrowings	Family expenditure on Farm	Capital expenditure on Farm	Current expenditure on Farm	Non-Farm business expenditure
	1	2	3	4	5
29. Poona (Bombay)	193	26	85	65	5
30. Bijapur (")	204	96	73	19	4
31. Osmanabad (Hyderabad)	207	129	43	20	5
32. Nizamabad (")	175	59	82	28	1
33. Mahbubnagar (")	270	113	120	22	4
34. Hassan (Mysore)	185	99	70	1	1
35. Bangalore (Mysore)	221	123	79	9	5
36. Coimbatore (Madras)	495	151	192	62	12
37. Cuddapah (")	439	207	112	78	27
38. Kurnool (")	476	159	200	78	16
39. West Gadavari (Madras)	578	171	198	111	64
40. Chingleput (")	312	86	177	26	7
41. Ramnathapuram (")	154	59	45	43	1
42. Malabar (")	409	191	112	29	42
43. Quilon (Travancore-Cochin)	278	133	43	11	59
44. West Khandesh (Bombay)	266	82	88	73	4
45. Kolhapur (")	99	47	21	22	1
46. Akola (Madhya Pradesh)	162	31	19	91	5
47. Sagar (")	514	123	131	76	160
48. Meerut (U.P.)	335	156	139	1	28
49. Nainital (U.P.)	258	137	81	2	17
50. Aligarh (")	206	86	97	2	9
51. Shahjahanpur (U.P.)	272	144	76	9	21
52. Sitapur (")	44	27	13	1	2
53. Sultanpur (")	94	44	19	16	2
54. Jaunpur (")	179	91	32	21	16
55. Deoria (")	288	170	36	53	6

Source: RBI - All-India Rural Credit Survey, Vol. III, Bombay, 1956, pp. 294-308.

TABLE A3.3 CASH LOANS OUTSTANDING FOR ONE YEAR OR LESS - AMOUNT CLASSIFIED ACCORDING TO PURPOSES AND SOURCES :
ALL CULTIVATORS (In Rupees per family)

	Capital Expenditure on Farm	Current Expenditure on Farm	Non-Farm Business Expenditure	Family Expenditure	Total amount Outstanding
	1	2	3	4	5
1. Malda (West Bengal)	22.6	11.9	3.9	59.0	106.2
2. Burdwan (")	3.4	2.5	2.6	49.7	60.8
3. Bhagalpur (Bihar)	22.5	21.6	0.5	106.5	157.1
4. Palamau (")	15.0	9.4	32.9	28.3	118.9
5. Sultanpur (Uttar Pradesh)	9.4	3.0	0.2	31.6	54.8
6. Shahjehanpur (")	16.6	14.5	8.3	45.9	108.5
7. Aligarh (")	55.5	3.8	8.9	86.2	183.8
8. Meerut (")	39.1	0.1	4.7	4.6	48.6
9. Sirmoor (Himachal Pradesh)	22.2	5.4	2.0	38.9	90.9
10. Bhatinda (Punjab/PEPSU)	59.8	2.0	2.0	304.4	567.6
11. Jaipur (Rajasthan)	72.2	0.4	0.8	184.5	520.1
12. Sawai Madhopur (Rajasthan)	108.3	77.9	3.5	262.1	471.9
13. Shajapur (Madhya Pradesh)	36.9	38.7	3.7	112.7	278.2
14. Bhilse (")	81.4	7.0	1.4	128.3	226.7
15. Rewa (")	21.6	1.7	2.0	54.6	91.7
16. Sambalpur (Orissa)	4.1	0.8	0.6	7.0	12.6
17. Chanda (Madhya Pradesh)	19.9	10.9	8.7	57.8	115.3
18. Sagar (")	114.1	11.9	31.3	114.3	302.9
19. Akola (")	3.7	49.7	9.8	6.7	74.7
20. Parbhani (Hyderabad)	7.9	11.0	0.5	50.4	69.8
21. Nizamabad (")	50.3	23.0	0.5	37.8	126.7
22. Mahbubnagar (")	123.6	11.1	8.8	92.4	238.0
23. Cuddapah (Madras)	91.2	105.1	26.4	220.9	517.8
24. Kurnool (")	88.5	112.5	0.8	100.3	443.0
25. West Godavari (Madras)	287.1	114.8	34.9	144.6	627.4
26. Chingleput (")	158.6	15.8	9.7	88.5	302.8
27. Malabar (")	44.0	50.1	23.7	134.8	341.4
28. Quilon (Travancore-Cochin)	10.2	7.9	19.5	27.0	100.6

Source: RBI All-India Rural Credit Survey, Vol. III, Bombay 1956, pp. 622-3.

TABLE A3.3 (continued) CASH LOANS OUTSTANDING FOR ONE YEAR OR LESS - AMOUNT CLASSIFIED ACCORDING TO PURPOSES AND SOURCES:
ALL CULTIVATORS (In Rupees per family)

	Co-operatives	Relatives	Agriculturist moneylenders	Professional moneylenders	Total amount outstanding
	6	7	8	9	10
1. Midnapore (West Bengal)	0.6	17.8	5.3	27.9	57.2
2. Deoria (Uttar Pradesh)	6.6	0.6	11.5	27.5	54.1
3. Sitapur { " " }	0.9	24.2	0.3	3.3	29.3
4. Hamirpur { " " }	2.7	5.5	26.7	58.8	108.5
5. Sultanpur { " " }	0.3	15.8	9.5	6.8	54.8
6. Jullandar (Punjab)	13.4	193.3	17.9	53.9	291.6
7. Puri (Orissa)	0.7	1.5	3.9	48.3	54.4
8. Meerut (Orissa)	1.0	31.1	7.7	5.3	48.6
9. Sirmoor (Himachal)	2.0	31.5	28.3	22.2	90.9
10. Broach (Bombay)	48.7	45.9	0.6	29.4	254.2
11. West Khandesh { Bombay }	43.0	75.4	123.6	26.5	308.9
12. Poona { " " }	43.3	16.4	40.3	20.2	208.3
13. Shajapur (Madhya Pradesh)	18.6	2.0	93.0	132.3	278.2
14. Bilaspur { " " }	0.3	12.4	42.4	8.4	67.8
15. Durg { " " }	0.1	0.1	23.6	20.2	48.4
16. Chanda { " " }	0.2	23.4	9.9	66.5	115.3
17. Sagar { " " }	8.1	31.8	73.6	92.5	302.9
18. Osmanabad (Hyderabad)	0.1	112.3	122.7	59.1	304.7
19. Nizamabad { " " }	3.7	7.1	85.5	6.9	126.7
20. Ramnathapuram (Madras)	0.9	0.4	93.4	3.5	122.2
21. Coimbatore { " " }	26.7	3.0	301.8	50.8	491.1
22. Kurnool { " " }	7.6	2.3	218.4	163.4	443.0
23. West Godavari { " " }	10.2	21.4	523.9	31.8	627.4
24. Chingleput { " " }	9.8	19.3	163.1	20.7	302.8
25. Malabar { " " }	4.1	8.9	131.3	18.0	341.4
26. Quilon (Travancore-Cochin)	3.9	9.5	0.1	50.2	100.6

Source: RBI All-India Rural Credit Survey, Vol. III, Bombay 1956, pp. 622-3.

TABLE A3.4 CASH LOANS BORROWED DURING JULY 1961 to JUNE 1962 ACCORDING TO SOURCES AND USES : 1961-2 : CULTIVATOR HOUSEHOLDS. ALL-INDIA : (In crores of Rupees)

States	1	2	3	4	5
	Capital expenditure in farm business	Current Expenditure in farm business	Household expenditure	Debt repayment	
1. Andhra Pradesh	28.33	13.28	44.77	8.09	
2. Assam	1.38	0.46	3.11	0.11	
3. Bihar	8.46	3.04	36.80	2.75	
4. Gujarat	12.10	17.40	36.70	2.79	
5. Jammu and Kashmir	0.79	0.06	6.16	0.02	
6. Kerala	3.53	2.12	24.48	3.19	
7. Madhya Pradesh	18.14	10.01	34.08	5.10	
8. Madras	31.63	15.50	31.82	10.35	
9. Maharashtra	15.46	35.17	26.16	0.81	
10. Mysore	20.22	14.93	32.33	6.77	
11. Orissa	2.30	0.25	6.48	0.19	
12. Punjab	15.88	2.51	34.15	1.96	
13. Rajasthan	25.85	6.64	60.55	4.62	
14. Uttar Pradesh	38.35	11.55	73.05	11.37	
15. West Bengal	4.85	6.50	26.07	1.47	

Source: Reserve Bank of India Bulletin, September, 1965, pp. 1357-8 and pp. 1363-5.

TABLE A3.4 (continued) CASH LOANS BORROWED DURING JULY 1961 to JUNE 1962 ACCORDING TO SOURCES AND USES : 1961-2 : CULTIVATOR HOUSEHOLDS. ALL-INDIA : (In crores of Rupees)

	Total Borrowing 6	Co-operatives 7	Relatives 8	Agriculturist Moneylenders 9	Professional Moneylenders 10
1. Andhra Pradesh	112.84	14.37	1.79	66.87	10.89
2. Assam	5.51	0.09	1.17	2.10	0.59
3. Bihar	61.23	1.61	4.59	38.41	9.07
4. Gujarat	70.93	18.23	15.03	4.12	4.50
5. Jammu and Kashmir	7.49	0.85	1.14	0.53	0.34
6. Kerala	41.01	4.90	4.64	2.97	1.35
7. Madhya Pradesh	75.00	13.01	2.59	25.48	21.09
8. Madras	101.98	16.81	3.64	60.99	6.91
9. Maharashtra	83.16	31.81	12.89	13.43	7.03
10. Mysore	79.97	16.50	5.17	34.49	0.74
11. Orissa	13.06	2.17	0.50	1.97	3.76
12. Punjab	59.39	6.26	8.27	18.35	9.78
13. Rajasthan	105.80	4.06	6.56	27.86	25.20
14. Uttar Pradesh	162.05	26.96	14.99	58.10	32.36
15. West Bengal	47.44	2.78	7.76	13.33	1.90

Source: Reserve Bank of India Bulletin, September, 1965, pp. 1357-8 and pp. 1363-5.

TABLE A3.5 CASH LOANS OUTSTANDING AS ON JUNE 1962 - ACCORDING TO SOURCES AND USES: CULTIVATOR HOUSEHOLDS: ALL-INDIA
(In crores of Rupees)

States	Capital expenditure in farm business	Current expenditure in farm business	Household expenditure	Debt repayment
1	2	3	4	5
1. Andhra Pradesh	91.82	26.97	116.69	20.25
2. Assam	5.89	2.79	10.12	0.36
3. Bihar	26.18	10.06	166.27	12.89
4. Gujarat	31.42	23.25	61.95	1.70
5. Jammu and Kashmir	1.18	0.08	9.50	0.02
6. Kerala	12.34	3.49	28.21	7.90
7. Madhya Pradesh	55.71	17.69	88.32	7.59
8. Madras	114.08	30.18	93.18	24.08
9. Maharashtra	49.51	55.52	44.48	1.43
10. Mysore	62.92	22.36	93.64	13.72
11. Orissa	5.95	0.94	19.51	0.65
12. Punjab	39.33	4.70	90.36	6.78
13. Rajasthan	56.76	8.56	131.00	6.32
14. Uttar Pradesh	69.29	12.84	154.21	14.08
15. West Bengal	9.96	12.29	48.56	1.97

TABLE A3.5 (continued) CASH LOANS OUTSTANDING AS ON JUNE 1962 - ACCORDING TO SOURCES AND USES: CULTIVATOR HOUSEHOLDS:
ALL-INDIA (In crores of Rupees)

	Total loans outstanding 6	Co-operatives 7	Relatives 8	Agriculturist moneylenders 9	Professional moneylenders 10
1. Andhra Pradesh	287.22	22.73	4.33	186.58	28.48
2. Assam	21.55	1.75	2.61	8.98	3.20
3. Bihar	235.00	1.97	8.53	175.97	27.18
4. Gujarat	120.48	29.78	22.79	12.70	9.93
5. Jammu and Kashmir	11.72	1.11	2.22	0.86	0.67
6. Kerala	59.13	5.38	8.91	9.82	3.33
7. Madhya Pradesh	180.48	22.70	3.96	66.34	57.27
8. Madras	292.83	28.93	6.81	193.89	19.76
9. Maharashtra	166.10	49.00	19.02	28.66	13.78
10. Mysore	203.60	23.46	9.84	126.84	2.95
11. Orissa	31.17	4.89	0.80	7.04	11.05
12. Punjab	157.48	11.13	17.90	75.35	22.12
13. Rajasthan	221.51	4.75	10.65	68.04	77.02
14. Uttar Pradesh	285.95	24.69	22.60	122.77	66.71
15. West Bengal	79.52	3.92	10.21	29.48	5.75

Source: Reserve Bank of India Bulletin, September, 1965, pp. 1329-1331 and pp. 1323-4.

TABLE A3.6 : AVERAGE BORROWING PER CULTIVATING FAMILY CLASSIFIED ACCORDING TO SOURCES: REGIONAL DATA: 1951-2
(Amount in Rupees)

Region	Total borrowings	Co-operatives	Relatives	Agriculturist Moneylenders	Professional Moneylenders
	2	3	4	5	6
1. Assam - Bengal	119.2	0.5	68.3	17.8	11.3
2. Bihar - Bengal	148.0	1.2	22.3	12.6	99.7
3. Eastern Uttar Pradesh	167.0	5.8	23.0	48.0	78.3
4. Western Uttar Pradesh	253.2	2.4	50.5	33.3	149.7
5. Punjab - PEPSU	261.7	5.9	79.9	78.5	63.0
6. Rajasthan	277.8	-	29.2	-	238.4
7. Central India	229.1	3.4	11.4	16.9	153.4
8. Orissa and East Madhya Pradesh	90.5	3.0	10.9	15.6	55.5
9. Western Cotton Region	238.3	27.7	54.6	15.7	82.2
10. North Deccan	235.5	16.7	24.0	90.9	76.4
11. South Deccan	343.7	7.1	8.9	202.0	96.1
12. East Coast	305.0	6.2	10.5	183.8	61.6
13. West Coast	253.9	6.4	27.0	39.0	47.5

Source: RBI - All-India Rural Credit Survey, 1951-52, Vol. I, Pt.2, Bombay, 1957, p.27.

TABLE A3.7 CASH LOANS BORROWED ACCORDING TO SECURITY : ALL CULTIVATORS : ALL-INDIA 1951-2
(In Rupees per family)

State/District	1	Total amount borrowed	2	Personal Security	3	Bullion and Ornaments	4	Immovable Property	5
1. Tripura (Tripura)		102.0		71.5		1.0		24.3	
2. Jalpaiguri (West Bengal)		70.7		67.5		0.7		2.5	
3. Malda (" ")		128.5		107.5		5.6		14.5	
4. Burdwan (" ")		66.4		48.3		7.5		10.6	
5. Midnapore (" ")		101.4		61.8		26.8		12.8	
6. Hazaribagh (Bihar)		31.5		27.9		2.5		1.1	
7. Deoria (Uttar Pradesh)		128.9		109.4		0.3		5.6	
8. Sultanpur (" ")		58.6		55.1		0.8		2.7	
9. Shahjahanpur (Uttar Pradesh)		167.6		84.7		0.9		0.9	
10. Agra (" ")		336.9		332.5		1.2		3.2	
11. Nanital (" ")		152.3		149.1		2.4		0.5	
12. Jullundar (Punjab)		385.6		360.6		2.1		22.9	
13. Jhabua (Madhya Pradesh)		79.7		70.1		1.9		0.4	
14. Shajapur (" ")		467.1		420.3		1.0		4.0	
15. Bhilsa (" ")		318.4		295.0		5.9		17.5	
16. Malabar (Madras)		397.7		334.5		4.3		54.0	
17. Satna (Madhya Pradesh)		29.8		16.1		12.5		1.2	
18. Rewa (" ")		91.7		62.7		14.7		14.3	
19. Sambalpur (Orissa)		15.7		14.2		0.4		0.1	

Source: RB I - All-India Rural Credit Survey, Vol. III, Bombay, 1956, pp. 595-6.

TABLE A3.7 (continued) CASH LOANS BORROWED ACCORDING TO SECURITY : ALL CULTIVATORS : ALL-INDIA 1951-2
(In Rupees per family)

State/District	1	Total amount borrowed	2	Personal Security	3	Bullion and Ornaments	4	Immovable Property	5
20. Puri (Orissa)		56.8		44.0		5.1		5.1	
21. Koraput (Orissa)		18.8		10.4		0.1		3.7	
22. Bilaspur (Madhya Pradesh)		81.4		60.1		8.6		10.8	
23. Durg (")		61.7		60.9		0.6		0.2	
24. Chanda (")		129.9		119.5		8.5		1.0	
25. Nagpur (")		176.2		158.4		9.4		8.4	
26. Sagar (")		502.2		378.7		4.5		118.7	
27. Sorath (Saurashtra)		222.4		142.2		20.6		38.6	
28. Broach (Bombay)		349.7		243.6		9.0		76.1	
29. West Khandesh (Bombay)		316.4		250.6		37.0		28.8	
30. Bijapur (")		270.9		257.4		4.1		4.2	
31. Nizamabad (Hyderabad)		179.7		164.5		2.7		6.1	
32. Hassan (Mysore)		264.1		225.7		0.4		38.0	
33. Coimbatore (Madras)		614.0		366.8		15.8		220.7	
34. Cuddapah (")		511.0		488.3		8.6		4.6	
35. Kurnool (")		491.4		478.3		4.5		1.7	
36. Chingleput (")		333.4		207.2		8.4		117.3	
37. Rannathapuram (Madras)		121.8		98.5		1.5		18.2	
38. Quilon (Travancore-Cochin)		149.3		111.2		15.1		22.6	

Source: RBI - All-India Rural Credit Survey, Vol. III, Bombay, 1956,
pp. 595-6.

TABLE A3.8 CASH LOANS OUTSTANDING FOR MORE THAN ONE YEAR: AMOUNT CLASSIFIED ACCORDING TO SECURITY: ALL CULTIVATORS:
ALL-INDIA: 1951-2 (In Rupees per family)

State/District	1	Total Amount Outstanding	2	Personal Security	3	Bullion and or ornaments	4	Immovable Property	5
1. Kamrup (Assam)		194.5		75.3		0.1		118.7	
2. Malda (West Bengal)		33.7		22.9		2.1		8.7	
3. Burdwan (")		223.3		98.2		20.0		105.0	
4. Hazaribagh (Bihar)		102.0		55.2		5.3		41.5	
5. Aligarh (Uttar Pradesh)		66.5		33.1		20.8		12.6	
6. Nanital (")		387.4		343.8		0.2		31.2	
7. Rewa (Madhya Pradesh)		34.1		18.1		6.1		9.9	
8. Durg (")		8.4		7.6		0.4		0.4	
9. Chandā (")		98.4		77.9		3.8		16.7	
10. Nagpur (")		77.3		24.5		19.5		32.6	
11. Sagar (")		67.2		54.0		6.4		6.8	
12. Sorath (Saurashtra)		163.1		44.3		26.5		24.4	
13. Ahmedabad (Bombay)		715.5		506.0		21.3		152.3	
14. West Khandesh (Bombay)		101.4		81.4		3.3		16.7	
15. Kolhapur (")		214.4		103.7		0.6		108.7	
16. Bijapur (")		136.9		97.3		13.4		26.2	
17. Parbhani (Hyderabad)		40.8		39.9		0.5		0.4	
18. Nizamabad (")		83.6		77.6		0.9		5.1	
19. Mahbubnagar (")		203.5		147.8		3.9		51.8	
20. Sambalpur (Orissa)		15.5		11.1		0.2		0.3	
21. Puri (")		5.4		4.7		0.2		0.5	
22. Hassan (Mysore)		341.5		201.9		0.8		138.1	
23. West Godavari (Madras)		400.1		382.0		2.7		15.4	
24. Chingleput (")		245.1		175.2		4.2		65.0	
25. Ramnathapuram (")		564.3		213.9		0.7		348.3	
26. Malabar (")		167.6		110.8		1.5		54.9	
27. Quilon (Travancore-Cochin)		116.2		50.3		4.1		61.8	

Source: RBI- All-India Rural Credit Survey, vol. III. Bombay, 1956,
 pp. 640-1.

TABLE A3.9 CASH LOANS BORROWED AND OUTSTANDING ACCORDING TO SECURITY: 1961-2 CULTIVATOR HOUSEHOLDS: ALL-INDIA
(Amount in crores of Rupees)

State	1	Total amount		Personal Security	Surety Security	Immovable Property	Bullion and Ornaments
		Borrowed (=A)	and Outstanding (=B)				
		2	3	4	5	6	
1. Andhra Pradesh	A	112.84	93.05	5.89	11.25	1.65	
	B	287.22	245.75	7.82	29.47	2.43	
2. Assam	A	5.51	3.28	-	1.81	0.01	
	B	21.55	13.43	0.21	7.36	0.03	
3. Bihar	A	61.23	48.33	0.49	11.79	0.48	
	B	235.00	122.50	3.75	107.47	0.68	
4. Gujarat	A	70.93	51.05	0.26	3.81	0.30	
	B	120.48	82.22	0.63	14.63	0.48	
5. Jammu and Kashmir	A	7.49	6.93	0.17	0.01	-	
	B	11.72	10.97	0.28	0.02	-	
6. Kerala	A	41.01	27.96	2.11	4.25	2.58	
	B	59.13	26.92	1.54	20.73	3.68	
7. Madhya Pradesh	A	75.00	60.57	7.56	5.05	1.78	
	B	180.48	146.71	13.55	14.31	4.74	
8. Madras	A	101.98	68.97	8.76	18.02	4.71	
	B	292.83	181.73	11.28	90.27	7.68	
9. Maharashtra	A	83.16	43.03	0.69	8.03	0.90	
	B	166.10	75.46	1.59	40.50	1.03	
10. Mysore	A	79.97	54.19	2.52	13.01	0.76	
	B	203.60	135.95	2.78	51.21	1.49	
11. Orissa	A	13.06	10.38	-	2.43	0.22	
	B	31.17	20.64	0.07	8.78	1.45	
12. Punjab	A	59.39	47.61	8.05	3.28	0.19	
	B	157.48	95.77	17.62	43.24	0.35	
13. Rajasthan	A	105.80	98.98	4.41	1.57	0.16	
	B	221.51	201.26	10.24	9.07	1.16	
14. Uttar Pradesh	A	162.05	125.26	28.90	4.61	2.53	
	B	285.95	224.68	28.57	24.77	5.86	
15. West Bengal	A	47.44	37.99	0.22	6.76	0.85	
	B	79.52	53.25	1.34	21.59	1.40	

Source: Reserve Bank of India Bulletin, September, 1965 pp. 1338-1340
and pp. 1372-4.

TABLE A3.10 CASH LOANS BORROWED DURING THE YEAR JULY 1961 JUNE 1962 :-
ALL-INDIA

Asset Group	Average per reporting household (Cultivator) (Rs.)
Less than Rs. 500	99
Rs. 500 - Rs. 1,000	147
Rs. 1,000 - Rs. 2,500	200
Rs. 2,500 - Rs. 5,000	291
Rs. 5,000 - Rs. 10,000	449
Rs. 10,000 - Rs. 20,000	693
Rs. 20,000 and above	1356

Source: Reserve Bank of India Bulletin, September 1965 :
p. 1306.

SHARE OF EACH ASSET GROUP IN THE AGGREGATE CASH BORROWINGS
OF ALL RURAL HOUSEHOLDS FROM CO-OPERATIVES - ALL-INDIA

Asset Group	Average per reporting household (Cultivator) (Rs.)
Less than Rs. 500	103
Rs. 500 - Rs. 1,000	138
Rs. 1,000 - Rs. 2,500	160
Rs. 2,500 - Rs. 5,000	214
Rs. 5,000 - Rs. 10,000	293
Rs. 10,000 - Rs. 20,000	415
Rs. 20,000 and above	899

Source: Reserve Bank of India Bulletin, September 1965 :
p. 1311.

TABLE A3.11 BORROWINGS AND INDEBTEDNESS AT SPECIFIED INTEREST RATES AS PERCENTAGES OF TOTAL BORROWINGS : 1951-2

Range of Interest Rates	Nil	Less than $\frac{3\frac{1}{2}\%}{3\frac{1}{2}\%}$	$3\frac{1}{2}\% - 7\%$	$7\% - 10\%$	$10\% - 12\frac{1}{2}\%$	$12\frac{1}{2}\% - 18\%$	$18\% - 25\%$	$25\% - 35\%$	$35\% - 50\%$
Proportion of Borrowing	23.73	...	7.50	6.20	21.01	3.90	24.05	5.82	2.86
Proportion of indebtedness	21.57	...	7.59	6.83	22.95	3.68	25.81	4.91	...

Note: ... sign means negligible.

Source: Reserve Bank of India - A.I.R.C.S., vol. III, Technical Report, Bombay, 1956, pp. 583-84 and pp. 610-611.

TABLE A3.12 PERCENTAGE OF BORROWING TO TOTAL BORROWING CLASSIFIED ACCORDING TO DIFFERENT RATES OF INTEREST : 1961-2 :
All cultivators :- (all-India)

Range of Interest Rates	Nil	$3\frac{1}{8}\%$ or less	$3\frac{1}{8}\% - 6\frac{1}{4}\%$	$6\frac{1}{4}\% - 9\frac{3}{8}\%$	$9\frac{3}{8}\% - 12\frac{1}{2}\%$	$12\frac{1}{2}\% - 18\frac{3}{4}\%$	$18\frac{3}{4}\% - 25\%$	$25\% - 37\frac{1}{2}\%$	over $37\frac{1}{2}\%$
Percentage of Borrowing	25.0	0.2	6.7	15.5	18.7	8.1	16.5	4.9	1.5
									2.9
									unspecified

Source: Reserve Bank of India Bulletin, September, 1965, statement : 10, pp. 1381-1383.

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